SD1
Managing Northern Kentucky's
Wastewater and Storm Water

September 4, 2015

Director of the Division of Enforcement
Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

Chief, Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
601 D street NW
Washington, DC 20005
DOJ Case No. 90-5-1-1-08591

Ms. Denisse Diaz, Chief
NPDES Permitting and Enforcement Branch
U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

Re: Consent Decree Case No. 2:05-cv-00199-WOB

To Whom It May Concern:

Pursuant to the above-referenced Consent Decree, Sanitation District No. 1 (SD1) was required to document its compliance with the Nine Minimum Controls (NMC), including proposed projects to be performed to ensure that compliance with the NMC is achieved by no later than twenty-four months after entry of the Consent Decree. SD1's NMC Compliance Report was submitted on March 12, 2008 to the EPA and Cabinet and received regulatory approval on July 6, 2008.

SD1 is required to submit an annual report on its implementation of the NMCs within sixty days after the anniversary date of the approved NMC Compliance Report. The enclosed report serves as the seventh annual report to demonstrate SD1's continued implementation of the NMCs.

A certification as required by the Consent Decree is also enclosed (Consent Decree paragraph 38).

1045 Eaton Drive • Ft. Wright, KY 41017 • phone 859-578-7450 • fax 859-331-2436 • www.sd1.org

To the best of my knowledge and belief, the enclosed report is true, accurate, and complete, and further demonstrates SD1's commitment to the mission of protecting and enhancing the water resources and quality of life in Northern Kentucky.

If you have any questions or concerns, do not hesitate to contact me at 859-578-7465 or by e-mail at drager@sd1.org.

Best regards,

David E. Rager
Executive Director

DER/wck
Enclosures

Sanitation District No. 1
September 4, 2015

Nine Minimum Controls
2015 Annual Compliance Report

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CERTIFICATION

Nine Minimum Controls 2015 Annual Compliance Report
Consent Decree Case No. 2:05-cv-00199-WOB

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David E. Rager
Executive Director

9-3-15
Date

COMMONWEALTH OF KENTUCKY

)ss.

COUNTY OF Kenton

The foregoing instrument was acknowledged before me this 3 day of September, 2014 by David E. Rager, Executive Director of Sanitation District. No. 1.

Angela M. Cook
Notary Public
Kentucky, State at Large
Comm. Exp. 07-30-16
Notary ID 471543

Angela M. Cook
NOTARY PUBLIC

Kenton County, Kentucky

My commission expires: 7-30-16

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NINE MINIMUM CONTROLS
2015 ANNUAL COMPLIANCE REPORT

September 4, 2015

Sanitation District No. 1
1045 Eaton Drive
Ft. Wright, KY 41017

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TABLES

LIST OF ACRONYMS AND ABBREVIATIONS

CSAP	Continuous Sewer Assessment Program
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
DWO	Dry Weather Combined Sewer Overflow
EPA	United States Environmental Protection Agency
GIS	Geographic Information Systems
LDSAP	Large Diameter Sewer Assessment
KDEP	Kentucky Department of Environmental Protection
KYTC	Kentucky Transportation Cabinet
MACP	Manhole Assessment Certification Program
MS4	Municipal Separate Storm Sewer System
NMC	Nine Minimum Controls
ORSANCO	Ohio River Valley Water Sanitation Commission
O&M	Operations and Maintenance
RWI	River Water Intrusion
SD1	Sanitation District No. 1
SIU	Significant Industrial User
S&F	Solids and Floatables

SECTION 1. INTRODUCTION

1.1 Overview

On April 18, 2007, Sanitation District No. 1 (SD1) entered into a Consent Decree with the U.S. Environmental Protection Agency and the Kentucky Energy and Environment Cabinet to address sanitary sewer overflows and combined sewer overflows (CSOs) in an effort to improve water quality throughout SD1's service area. As part of this agreement, SD1 was required to document its compliance with the Nine Minimum Controls (NMC) for CSOs as set forth in the CSO Control Policy, including proposed projects to be performed to ensure that compliance with the NMC is achieved by no later than twenty-four months after entry of the Consent Decree.

SD1's NMC Compliance Report was submitted on March 12, 2008 to the EPA and Cabinet and received regulatory approval on July 6, 2008.

1.2 Report Ob ective

Pursuant to the Consent Decree, SD1 is required to submit an annual report on its implementation of the NMCs within sixty days after each anniversary date of the approval of the NMC Compliance Report. The enclosed report serves as the seventh annual report to demonstrate SD1's continued implementation of the NMCs, from January 1, 2014 to December 31, 2014.

SECTION 2. NINE MINIMUM CONTROLS

The following sections present detailed descriptions of SD1's continued compliance efforts during 2014. These compliance efforts are in direct response to the Consent Decree requirements, to the guidance provided in the CSO Control Policy, and EPA's Guidance for Nine Minimum Controls.

2.1 NMC #1 Proper Operation and Regular Maintenance Programs for the Sewer System and CSO Outfalls

The purpose of this control is to establish operation, maintenance, and inspection procedures to ensure that the combined sewer system (CSS) and treatment facility will perform as effectively as possible to maximize treatment of combined sewage and reduce the magnitude, frequency, and duration of CSOs.

SD1 tracks its operation and maintenance (O&M) activities using the computerized maintenance management system Lucity. Appendix A provides an overview of the major activities performed in both the separate sewer system and CSS through implementation of regularly scheduled O&M activities, as well as SD1's formal Continuous Sewer Assessment Program (CSAP). The data represents approximate amounts of work completed by both internal and external crews and has been updated from previous years, based on SD1's continued improvements in Lucity recordkeeping.

2.1.1 Information Management Tools

In 2014, SD1 began utilizing tablets and mobile applications to streamline and improve data collection and inspection records within its computerized maintenance management system, Lucity. Three employees in the SD1 Collections Systems Department were provided Samsung tablets with Lucity mobile applications that are capable of recording live inspections and linking pictures directly to the inspection and asset records, through the Verizon network.

Previously, inspections were being performed on paper in the field, and then digitized in the office using laptops or desktops. The initial goal of this upgrade was to improve the efficiency of CSS catch basin condition and functionality inspections. After working out the initial bugs and connectivity issues with the network, it was demonstrated in 2014 that the tablets provide a clear efficiency gain. SD1 plans to expand the deployment of the tablets in 2015 to approximately ten more employees, in order gain additional efficiencies with trouble calls and post-wet weather CSO/SSO inspections routines.

2.1.2 Asset Operation and Maintenance

Catch Basin Functionality Ratings

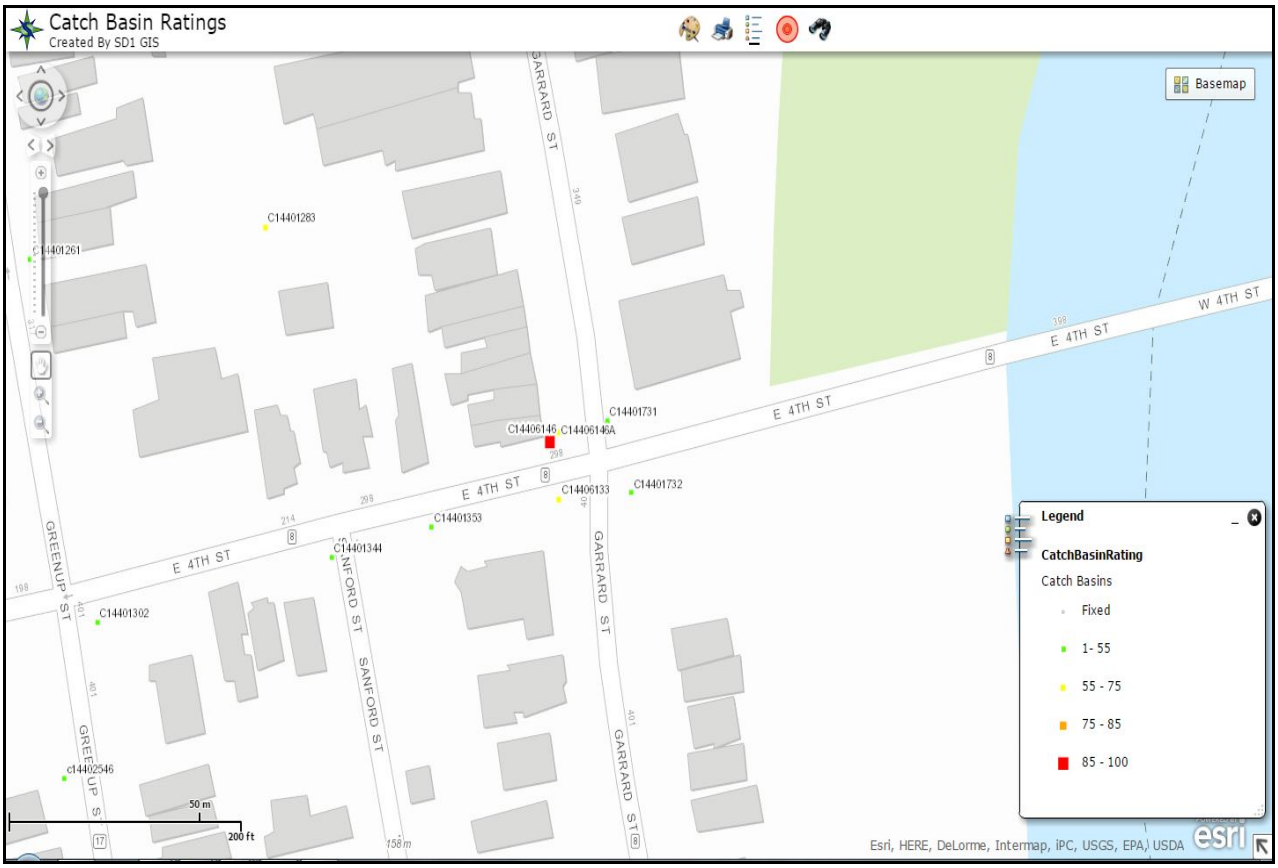
As described in the 2014 Nine Minimum Controls Annual Report, SD1 began a supplementary rating system that indicates the above-the-grate functionality of catch basins and the effectiveness of the surface drainage. The new program includes inspection parameters, such as: road slope, slope from centerline to catch basin, curb heights, throat dimensions, positions of the catch basin relative to the gutter, road width, grating size, debris accumulation in the street, and overall functionality rating scores. The new data being collected helps SD1 better inform municipalities of the effects of their resurfacing and street sweeping programs, which minimizes recurring flooding problems and debris buildup. By the end of 2014, SD1 completed over 4,000 functionality assessments on approximately 3,800 CSS catch basins, in eight cities. SD1 expects to expand the program into MS4 communities in the future. Assessments will be provided to each city on three to five year cycles.

To date, SD1 has contacted five of the eight CSS communities to share the results of its system-wide above-the-grate functionality assessments. Communication has been directed toward each of the mayors, city administrators, and public works directors.

As an example of SD1's communication efforts with the CSS cities, Appendix B contains documents that were shared with the City of Covington. These documents define the program; provide results of the catch basin grates that scored in the top quartile within the city; and recommend areas of improvement where functionality scored poorly. Additionally, SD1 delivered a secure web-map with login credentials to city officials and employees that clearly demonstrate the functionality scores of the surface condition at each catch basin.

Figure 2.1 illustrates the web-map customized for the City of Covington and the scored catch basin surfaces in the vicinity of the Fourth Street Bridge, near the Licking River.

Figure 2.1 E ample of Web-Map for Above-the-Grate Functionality Ratings



Catch Basin Inspection and Maintenance

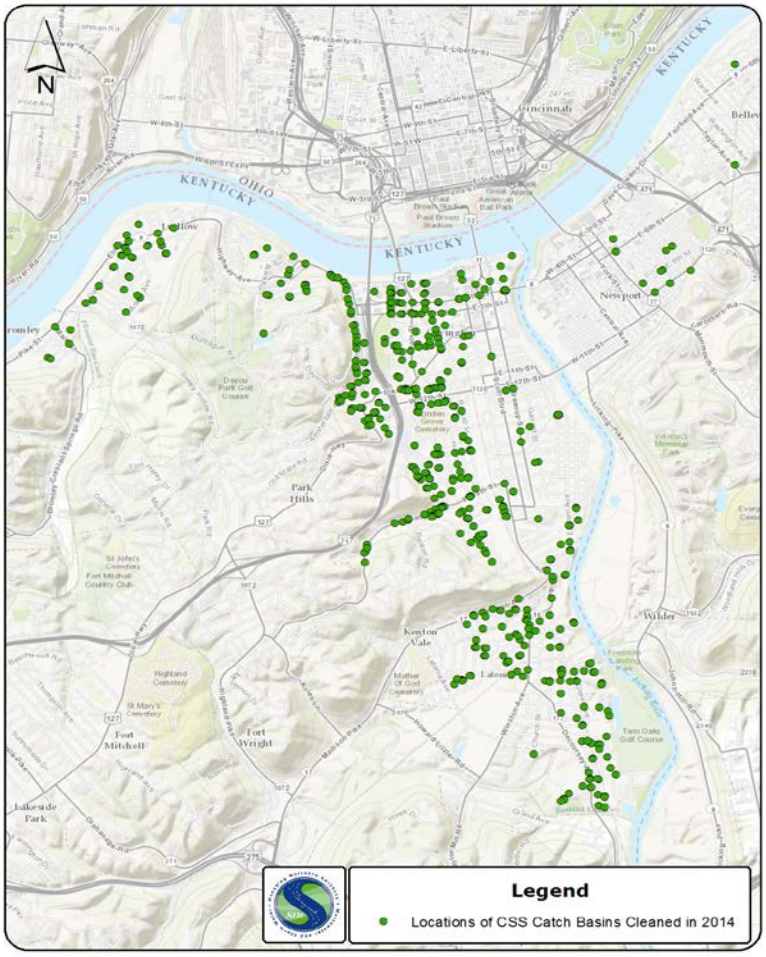
Annual inspections on all public CSS catch basins, to document maintenance and rehabilitation needs, continue to be performed, in accordance with SD1's NMC program.

SD1-Owned Catch Basins

SD1 performed 2,971 inspections on CSS drainage structures during 2014, and performed approximately 544 cleanings at approximately 515 locations. Figure 2.2 displays the approximate 515 locations that were cleaned during 2014.

SD1 continually reviews its collected inspection data to adjust maintenance strategies and keep catch basins clean. All public catch basins are inspected at least once each year and cleaned on an as-needed basis. In addition to the as-needed cleanings, crews continue to clean a targeted group of catch basins with specific preventive maintenance schedules that have proven to be effective.

Figure 2.2 Locations of CSS Catch Basin Cleanings in 2014



Private-Owned Catch Basins

During 2014, SD1 conducted approximately 15 inspections of privately owned catch basins. Additionally, SD1 performed 9 inspections on newly discovered catch basins where ownership has not yet been determined. No new catch basins were installed downstream of private systems to trap solids and floatables from private systems, however this method of control for private-source solids and floatables remains a viable option for SD1, along with enforcement.

KYTC-Owned Catch Basins

SD1 has finalized its mapping and ownership review of 538 CSS drainages structures with the Kentucky Transportation Cabinet (KYTC). SD1 has updated its records to reflect KYTC's acceptance of ownership for approximately 375 of the structures. In 2014, SD1 inspected nine of the 375 drainage structures that KYTC owns in the CSS.

SD1 has accepted ownership and maintenance responsibility for approximately 145 of the 163 structures that KYTC rejected during the review. Approximately 18 were determined to be privately owned.

SD1 has advised KYTC of the conditions found in its structures, and the need for maintenance at approximately 97 locations. SD1 will continue to periodically monitor the KYTC-owned structures in the future to make further recommendations for cleaning and repair.

Figure 2.3 demonstrates typical maintenance needs that are found in KYTC-owned structures in the CSS.

Figure 2.3 E ample of Maintenance Needed in a KYTC-Owned CSS Structure

Diversion and CSO Outfall Inspection and Maintenance

SD1 regularly inspects each diversion and the associated CSO outfall on a weekly or bi-weekly basis, as well as after every wet-weather event that exceeds half of an inch of rain. Cleanings are performed on an as-needed basis at the locations that have solids and floatables controls installed at the diversion manhole or the outfall (see NMC #6 for further details on SD1's solids and floatables program).

Throughout 2014, SD1 performed approximately 5,317 inspections at 133 CSO diversions. Approximately 6 percent of the inspections were performed during wet

weather, 35 percent during dry weather, and 59 percent within 48 hours of a wet-weather or high-river event. The information gathered from these inspections is used to identify and respond to conditions that may lead to dry-weather overflows. The data is also used to verify the accuracy of wet-weather CSO statistics predicted by SD1's hydraulic model.

2.2 NMC #2 Ma imum Use of Collection System for Storage

The purpose of this control is to maximize the use of the collection system by making relatively simple modifications to the CSS to enable the existing sewers to store wet weather flows until capacity is available in the downstream collection and treatment systems in order to reduce CSO volume.

2.2.1 In-Line Storage

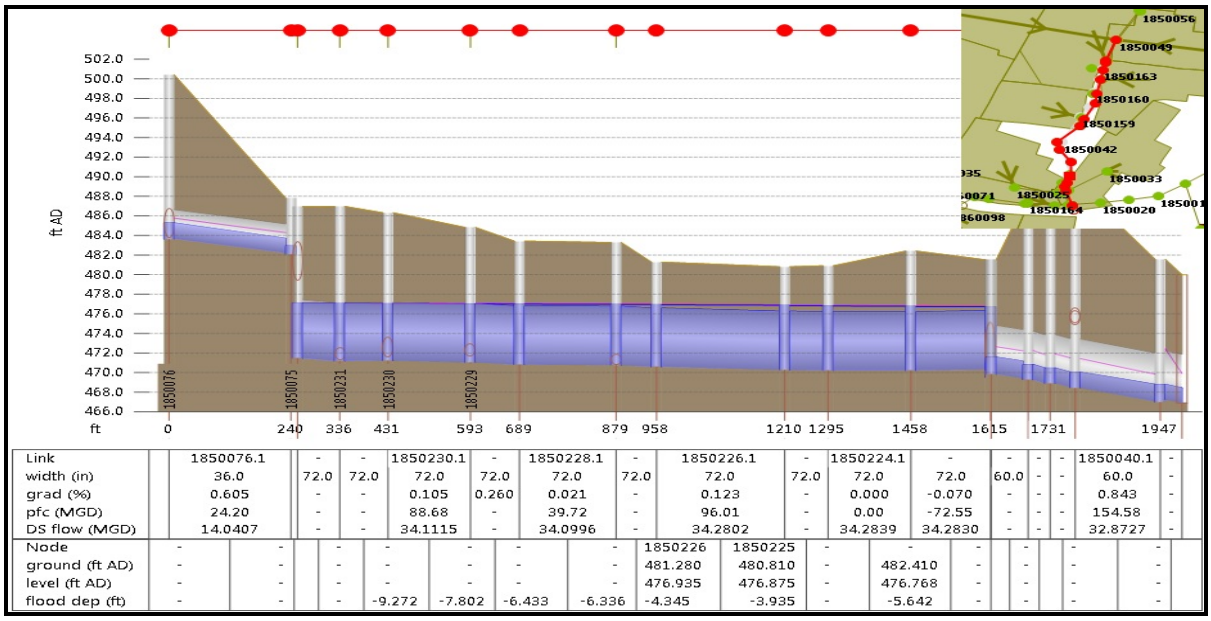
Church Street CSO Reduction Project

Construction continued on the Church Street CSO Reduction Project throughout 2014, and the first phase was completed in early 2015. The project includes upsizing of the existing 1,700 feet of 36-inch and 48-inch pipe to approximately 1,400 feet of 72-inch pipe. In addition to the upsized pipe,, a new diversion chamber with a raised weir solids and floatable control screen has been installed. Catch basins have also been disconnected from the collection system near the Church Street interceptor. With the completion of the first phase of the project in 2015, SD1 anticipates to reduce CSO from 57.6 million gallons to approximately 25 million gallons in a typical year.

A significant component of SD1's CSO reduction strategy for Church Street was to increase the in-line storage in the new 72-inch interceptor. The weir wall invert in the newly constructed diversion chamber is approximately 4.5 feet higher than the original 1-foot weir wall. This new weir elevation allows SD1 to utilize all of the available in-line storage in the 72-inch interceptor, which can contain up to approximately 275,000 gallons when the pipe is full.

Figure 2.4 demonstrates the SD1 collection system model's typical year profile for the new 72-inch Church Street interceptor, and the gained in-line storage with the raised weir.

Figure 2.4 Typical Year Model Profile of Church Street In-Line Storage



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grad (%)	0.605	-	-	0.105	0.260	0.021	-	0.123	-	0.000	-0.070	-	-	-	0.843	-
pfc (MGD)	24.20	-	-	88.68	-	39.72	-	96.01	-	0.00	-72.55	-	-	-	154.58	-
DS flow (MGD)	14.0407	-	-	34.1115	-	34.0996	-	34.2802	-	34.2839	34.2830	-	-	-	32.8727	-

Node	-	-	-	-	-	-	-	1850226	1850225	-	-	-	-	-	-	-
ground (ft AD)	-	-	-	-	-	-	-	481.280	480.810	-	482.410	-	-	-	-	-
level (ft AD)	-	-	-	-	-	-	-	476.935	476.875	-	476.768	-	-	-	-	-
flood dep (ft)	-	-	-	-9.272	-7.802	-6.433	-6.336	-4.345	-3.935	-	-5.642	-	-	-	-	-

2.2.2 River Water Intrusion Mitigation

River water intrusion (RWI) during wet-weather events has the potential to occupy in-line storage volume that would otherwise be available to combined sewers flows. Therefore, controlling river intrusion in the CSO outfalls increases the available storage volume and maximizes storage of wet-weather flows.

SD1's initial approach to protecting against RWI consisted of the installation of Tideflex duckbill check valves at 42 locations, impacting 39 CSOs, where diversion inverts were determined to be at or below the river stage of 47 feet on the Ohio River. The Tideflex check valves can either be installed on the end of the existing outfall pipes, or in chambers constructed upstream of the existing outfall. Locations of the Tideflex installations depend on accessibility to the end of outfall pipes. In some locations, the headwalls may be replaced or modified to accommodate the Tideflex check valves. SD1 also regularly seals manholes in low lying areas near the CSO outfalls, and inspects watertight lids to ensure proper protection against RWI.

<u>RWI Check Valves</u>

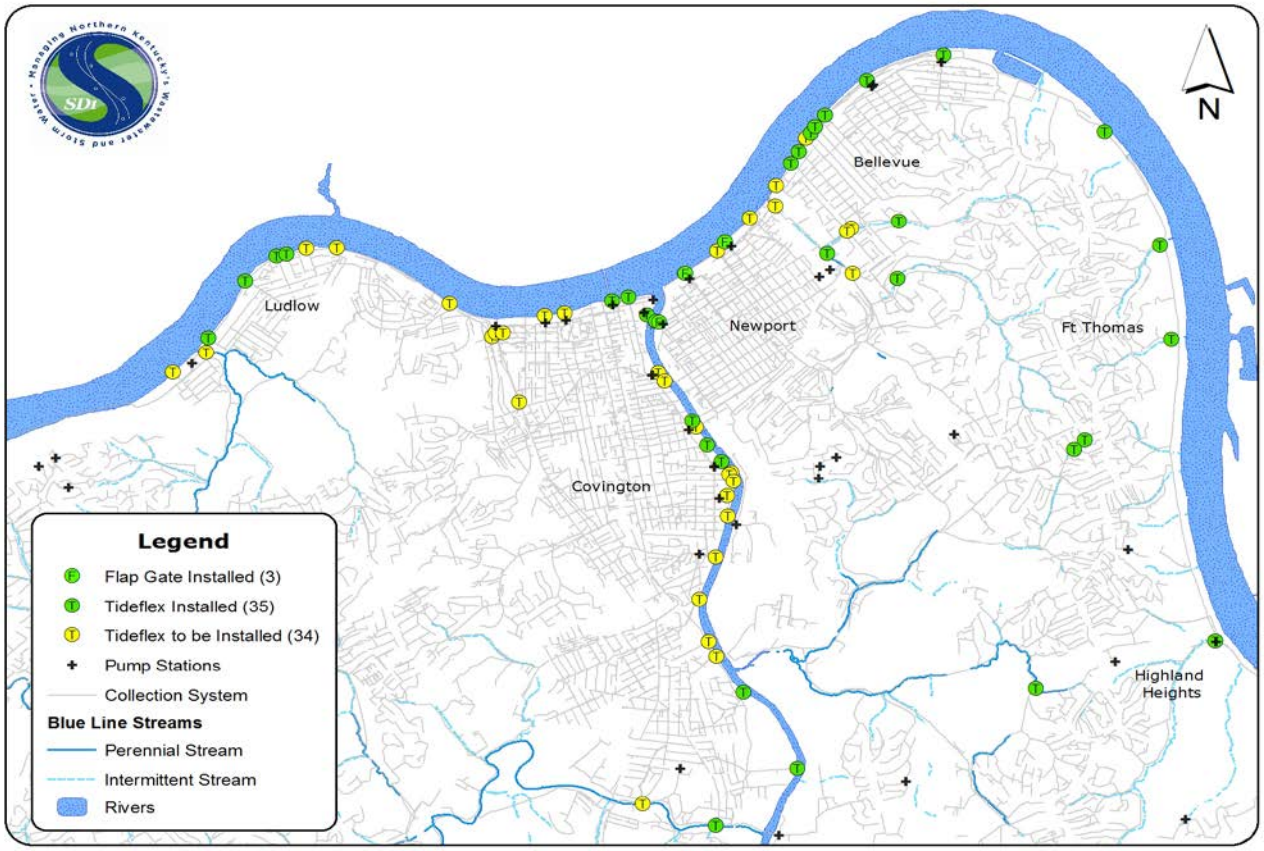
In 2014, SD1 did not install any new Tideflex check valves. SD1 will continue to install Tideflex check valves for the RWI mitigation program, as funding becomes available.

To date, Tideflex check valves have been installed in five of the original 42 targeted locations. In 2012, SD1 refined its initial evaluation of the program by converting an outdated datum for the Ohio River to a modern datum, which revealed three of the original 42 locations are not susceptible to RWI. With the completed projects and the elevation corrections, the program currently consists of 34 locations to be targeted for Tideflex installation, impacting 31 CSOs. The RWI program may be revised further, as high river data continue to be analyzed and new technology becomes available.

SD1 has a total 36 CSO and SSO outfall pipes along the rivers and creeks of Northern Kentucky that are equipped with Tideflex check valves. Additionally, three CSO outfall pipes are equipped with flap gates to protect against river intrusion.

Figure 2.5 illustrates RWI check valves that currently exist, in green, and where future Tideflex valves are planned for installation, in yellow.

Figure 2.5 Installed and Planned Locations of RWI Check Valves



Repaired Manholes in the Combined Sewer System

In 2014, SD1 continued to repair and rehabilitate structures in the CSS to mitigate excessive inflow and infiltration. One of the 27 structures rehabilitated in the CSS is a low lying manhole on the outfall of CSO 1490172 (KY0021466 – Outfall 64), which was sealed and made watertight.

2.3 NMC #3 Review and Modification of Pretreatment Re uirements

The purpose of this control is to minimize the impacts of discharges into the CSS from non-domestic sources during wet weather events, and to minimize CSO occurrences by modifying inspection, reporting and oversight procedures within the approved pretreatment program.

Standard Permits

SD1 permitted Boge Rubber and Plastics USA as a new Significant Industrial User (SIU), during 2014. However, the site is not located within the CSS. With this addition, SD1 had a total of 55 permitted Significant Industrial Users in its collection system as of December 31, 2014.

Newport Aquarium, an SIU in the CSS, is no longer being permitted, as of 2014. The Aquarium was initially permitted as a precaution until SD1 better understood its operations. It has been determined that the Aquarium does not meet the definition of an SIU and it poses no threat to the SD1 collection system.

Wet Weather Permit Conditions

Three SIUs have special conditions in their permits, requiring zero discharges during wet weather, due to their locations within the CSS. SD1 conducts an annual surprise inspection during wet weather to ensure that the SIUs are in compliance with their permits. In 2014, no SIU in the CSS was found to be discharging during wet weather.

The three SIUs in the CSS, during 2014, with special conditions in their permits are:

- Imperial Sugar Company – Ludlow
- Louis Trauth Dairy – Newport
- McGinnis Incorporated – Ludlow

Compliance Monitoring

In 2014, no special short term discharge permits were issued.

Enforcement

SD1 issued the following enforcement actions during 2014:

- 59 Notice of Violations, none in the CSS.
- $6,000 in administrative fines issued with 10 of the Notice of Violations.

Pretreatment Modifications

No modifications were made to the pretreatment program in 2014.

2.4 NMC #4 Ma imi ation of Flow to POTW for Treatment

The purpose of this control is to maximize flow to the treatment plant by making simple modifications to the CSS and treatment plant to enable as much wet-weather flow as possible to reach the treatment plant, thereby minimizing the magnitude, frequency, and duration of CSOs that flow untreated into receiving waters.

Dry Creek Wastewater Treatment Plant Improvements

SD1 continued making progress on the additional capacity improvements at the Dry Creek Wastewater Treatment Plant in 2014. These improvements are intended to provide the following benefits:

- Increase in plant screening and grit removal, and increase wet weather treatment capacity from 75 million gallons per day to 160 million gallons per day. This improvement will remove the current screenings capacity limitation identified in the NMC Compliance Report dated March 12, 2008 and is consistent with the Watershed Plan's long-term strategy to increase the wet-weather capacity of the Dry Creek Wastewater Treatment Plant to 160 million gallons per day.
- Equalized flow splits between plant final clarifiers to allow for more consistent operation and accommodate future increases in flow.
- Odor control for solids storage and dewatering.
- Reduce typical year CSO volume by 34 million gallons.

Project C-401-44-1 Headworks, Hydraulics & Odor Control Improvements

SD1 completed the Dry Creek Headworks project in 2014. The new headworks project provides SD1 with the ability to deliver preliminary treatment to separated sanitary flows, which arrive from the Lakeview Pump Station, while the original headworks continue to receive combined flows from the Bromley Pump Station. By segregating the two headworks, SD1 has made significant progress towards the goal of doubling the peak wet-weather treatment capacity at the Dry Creek Wastewater Treatment Plant.

Bromley Pump Station

SD1 began a condition assessment of Bromley Pump Station in 2012. The study identified the pump station's immediate needs, short-term improvements, and long-term improvements that will keep it operational over the next two decades. Condition assessments of the pump station's mechanical equipment, pumps, air conditioning, plumbing, structural integrity, instrumentation, and electrical systems were performed.

In 2014, SD1 repaired a motor and replaced two of the four volutes at the Bromley Pump Station. These needed improvements were identified in the 2012 condition assessment. The repaired motor and replaced volutes minimally impact flow to the treatment plant, but do provide safeguards against conveyance failure in the near-future.

Covington Detention Basins

In July of 2010 and July of 2013, the City of Covington experienced wide-spread flooding and basement backups in low-lying areas of the CSS, as the result of back-to-back 100-year and 50-year storm events. SD1 began a study in late 2013 to mitigate peak storm flows in these low lying neighborhoods, and developed planning-level designs for five storm water detention basins that will provide a higher level of service and some CSO reduction. Initial modeling indicates that, in a typical year, the five proposed detention basins will provide 2.5 to 3.5 million gallons of CSO reduction without enhanced infiltration, and 5 to 7 million gallons of CSO reduction with engineered soils to enhance infiltration. Alternatives continue to be analyzed for the on-going projects. In partnership with the City of Covington on construction costs, SD1 anticipates that at least three detention basins will be complete by the end of 2015.

2.5 NMC #5 Elimination of CSOs during Dry Weather

The purpose of this control is to ensure overflows do not occur in the CSS during dry-weather conditions by implementing measures that focus on proper and efficient collection system operation.

Investigations to Identify Potential Dry-Weather Overflow Locations

In conjunction with the routine CSO diversion inspections described in Section 2.1, inspectors visually look for debris and blockages that may trigger dry-weather overflows, or would affect the ability of the diversions to maximize the flows entering the interceptors during rainfall. Diversion structures that have dry-weather overflow records or have the potential to overflow during dry weather are evaluated in further detail to determine a recommended course of action, which may include more frequent monitoring. Diversions where multiple dry-weather overflows have occurred are further evaluated for additional actions that include:

- Catch basin modifications to reduce solids that may cause dry-weather overflow risk at the downstream diversion.
- Permanent modifications to the diversion, such as removing a weir plate, removing the bar rack over the diversion or upsizing the diversion pipe.
- Targeted cleaning upstream or at diversions to address solids deposits.
- More frequent inspections for those with a configuration considered susceptible to dry-weather overflow or for previously modified locations to confirm that the issue has been sufficiently addressed.
- Permanent monitoring for early warning at locations where other measures have failed to address the issue.
- Installation of wireless flow meters or level sensors in the diversion's bypass pipe that provide email alarms to SD1 staff if a dry-weather CSO is occurring.

Dry-Weather CSO Inspection Frequency

Historically, SD1's CSO investigation crews have inspected every CSO diversion once per week and after every rainfall event greater than half of an inch. The information gathered from these diversion inspections have been used to characterize the activity of CSOs during wet weather, and to identify locations susceptible to dry-weather overflows and the measures needed to eliminate them from reoccurring.

EPA's 1995 Guidance for Nine Minimum Controls for the fifth minimum control allows for historical trends and patterns to be analyzed to determine where inspection frequency adjustments are appropriate. According to the NMC Guidance, greater scrutiny should be given to areas of historical dry-weather overflows. Diversions that have never experienced a dry-weather overflow, are in good repair, and have no known hydraulic capacity issues, may be inspected less frequently.

SD1 made a minor modification to the dry-weather inspection routine of some CSO diversions in 2013. Based on historical inspections, modeled data, targeted CCTV inspections of upstream pipes, and EPA's 1995 Guidance for Nine Minimum Controls, SD1 determined that 37 diversions no longer need weekly dry-weather inspections. These 37 locations have shown no evidence of structural or maintenance issues, or lack of capacity that would lead to a dry-weather overflow. EPA's NMC guidance suggests that monthly inspections of such locations may be suitable, but SD1 is inspecting these 37 locations on a bi-weekly basis. The bi-weekly inspection frequency of the 37 diversions may be adjusted to a monthly schedule in the future, if the bi-weekly schedule results in no additional dry-weather CSOs. No new adjustments to the CSO inspection routes were made in 2014. The list of weekly and bi-weekly dry-weather inspection routes are provided in Appendix C.

Targeted Inspection Effort – LDSAP Diversion Sub-Program

SD1's Large Diameter Sewer Assessment Program (LDSAP) has a sub-program dedicated to pipe assessment and maintenance in the vicinity of CSO diversions. The Diversion Sub-Program began in early 2011 as a targeted inspection and cleaning strategy for pipes that are within a 1000-foot radius of all CSO diversions. The subprogram systematically and repeatedly assesses all lines upstream of the diversions, and produces appropriate next actions in the Continuous Sewer Assessment Program (CSAP). This level of proactive maintenance in the combined system has improved SD1's ability to eliminate accumulating debris in critical areas and curtail dry-weather CSOs. In 2014, SD1 inspected approximately 7,975 feet of pipe in the LDSAP Diversion subprogram and cleaned approximately 51,485 feet. The LDSAP Diversion subprogram accounted for more than eight percent of all pipe cleanings, during the reporting period. Pipes that are cleaned as a part of this subprogram are reassessed, according to the CSAP logic, to determine the effectiveness of the preventative maintenance and to evaluate potential sources of returning debris that may lead to dry-

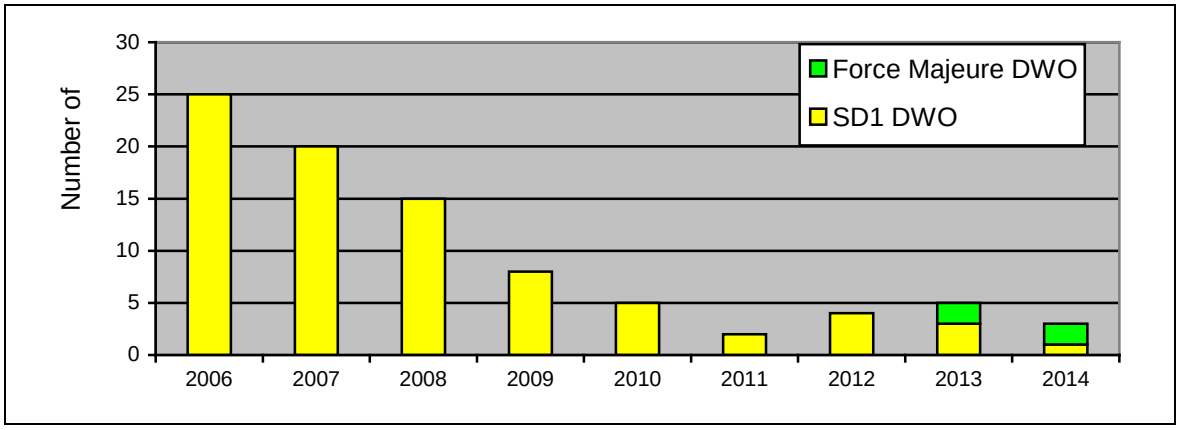
weather CSOs. SD1 anticipates cleaning another 25,000 feet of LDSAP Diversion pipes as follow-up CSAP next actions in 2015.

The total footage of pipe inspected and cleaned, and the amount of debris and grit removed as part of the LDSAP Diversion Sub-Program, is included in the O&M data presented in Appendix A.

Annual Frequency of Dry-Weather CSOs

SD1 has continued to make significant progress in reducing the frequency of dry-weather CSOs (DWOs), as summarized in Figure 2.6.

Figure 2.6 Occurrences of Dry Weather CSOs (2006 through 2014)



2014 Dry-Weather CSOs

SD1 recorded three dry-weather CSOs during 2014. In a letter dated November 24, 2014, from the Kentucky Department for Environmental Protection (KDEP) and the United States Environmental Protection Agency (EPA), it was determined that two of the three recorded dry-weather CSOs in 2014 were probable Force Majeure events, pursuant to Paragraph 61 of the Consent Decree. Additionally, two dry-weather CSOs from 2013 were determined to be probable Force Majeure events. The letter documenting the Force Majeure findings can be found in Appendix D.

Summary of the three dry-weather CSOs, including the locations, causes of overflows, estimated overflow volumes, and the actions taken to prevent the overflows from reoccurring are provided in Table 2.1. More thorough descriptions of the overflow events can be found in SD1's 2014 Consent Decree Quarterly Reports.

Table 2.1 Summary of Dry Weather CSOs that Occurred in 2013

Structure ID#	Location	Date	Overflow Cause	Estimated Volume	Corrective Action Taken
1480187	Covington, KY Willow Run CSO Outfall	04/01/14	Emergency construction due to landslide	607,500 gallons	On March 26, 2014, a portion of the 60-inch Ohio River Interceptor was severed due to a landslide. The landslide was later found to be a result of illegal dumping and fill along the river, and destabilization from consecutive high river events. During the temporary repair, the bypass pumps could not keep up with the flow. No space was available to install additional bypass pumps. SD1 had to divert dry weather flow out of the Willow Run CSO for approximately 2 hours to complete the temporary repair. SD1 has since rerouted the 60" interceptor through bedrock to avoid further landslide issues in this area. *Force Majeure
0790008	Newport, KY River interceptor damaged. DWO occurred at Columbia St CSO due to river intrusion and backwater.	04/09/14	Barge accident during high river conditions	6,700,000 gallons	During high river conditions, a barge struck a structure on the interceptor along the Newport side of the Licking River. When the river receded and the flood control system was deactivated, the 2nd Street Pump Station could not keep up with the flow. The river was still high enough to be pouring into the broken manhole. SD1 had to wait another day before the river level dropped low enough to repair and secure the manhole. *Force Majeure

Structure ID#	Location	Date	Overflow Cause	Estimated Volume	Corrective Action Taken
0980016	Covington, KY 13th Street CSO Outfall	09/23/14	Blockage of debris	1,000	A blockage of sticks and plastic bottles in the diversion structure caused the DWO. The debris was removed with a rake, and flow returned to the pipe. The CSO diversion will continue to be inspected on a weekly basis.

SD1 Enforcement of Illegal Connections to CSO Outfalls

During the planning phase of Kentucky Transportation Cabinet's (KYTC) realignment of State Route KY-9, SD1 issued notices of violation to three customers at the southern extent of the project area. It was determined after thorough evaluation of the collection system, that the three properties were improperly connected to the CSO outfalls. SD1 issued correction notices with deadlines for removing the illegal connections. Two of the three customers immediately implemented temporary solutions. The third customer's building was vacant and for lease, and was not actively discharging. SD1 provided each customer with guidance on permanent corrections and coordination with KYTC. Permanent solutions have been implemented at two of the three buildings. The third building is slated for future demolition, but has demonstrated compliance with its temporary solution.

On the following page, Figure 2.7 provides a map of the three buildings in southern Newport that were found to have illegal connections to CSO Outfalls 0730129 and 0840116, which were corrected with SD1 enforcement measures.

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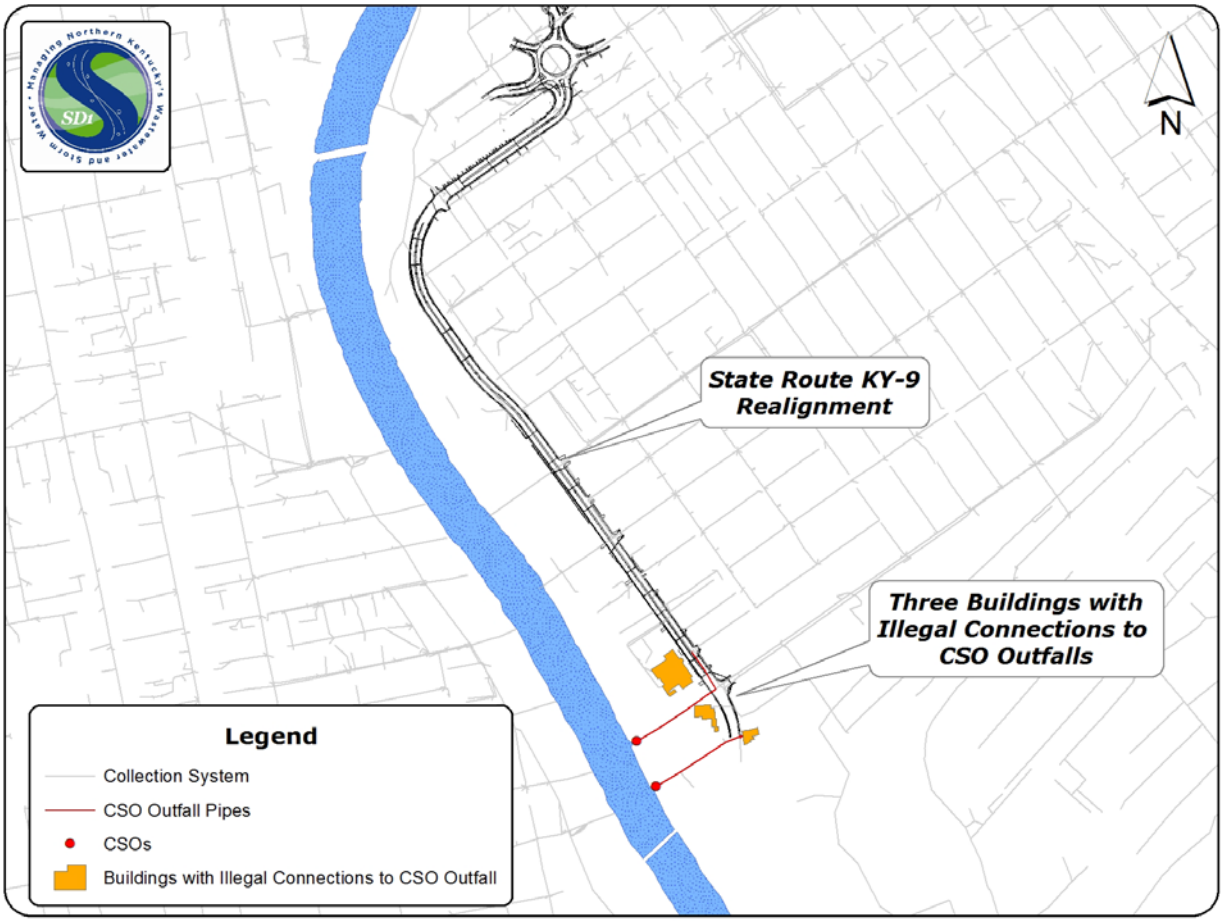
Figure 2.7 Illegal Connections to Newport CSOs Enforced in 2014



2.6 NMC #6 Control of Solid and Floatable Materials in CSOs

The purpose of this control is to reduce the amount of solid and floatable (S&F) material discharged to water bodies through wet-weather CSOs through the implementation of simple measures such as: baffles, screens, catch basin modifications, and nets.

Catch Basin Modifications

In 2014, SD1 continued replacing catch basins and retrofitting catch basins with bells and grated inlets to reduce the amount of S&F materials entering the CSS. Currently, the following factors are considered when determining if a bell installation is appropriate are:

- Catch basin is in need of structural repair and does not have a bell.

- Catch basin is in need of total rehabilitation and can be replaced with a new catch basin that has both a grated inlet and a bell.
- SD1-owned catch basin directly upstream of a dry-weather overflow that appears to be a source of debris will be retrofitted with a bell.

SD1 performed 35 catch basin repairs in 2014. SD1 also replaced 28 catch basins in the CSS, of which 19 were open curbs converted to grated structures. The newly replaced catch basins were also equipped with bells. Of the currently known 5,951 public, private, and state-owned catch basins and inlets in the CSS, there are approximately 2,670 structures that are known to be equipped with a trap or bell for solids and floatables control.

In-line and End-of-Pipe Controls

SD1's solids and floatables controls program is summarized in Table 2.2. The program consists of approximately 40 controls, including:

- 17 static weirs
- 12 outfall nets
- 4 baffles
- 4 baffle chambers
- 1 bar rack
- 1 combination weir and baffle
- 1 combination weir and screen

The engineered solids and floatables control baffle chambers at Greenup Street, Main Street, McKinney Street and Garrard Street also include sumps to capture grit and other heavy solids.

During 2014, no new end-of-pipe solids and floatables control projects were completed. Regular maintenance of the existing controls, such as baffle chamber cleanings and net replacements, were performed on an as-needed basis in response to the regular CSO diversion inspections outlined in Section 2.1.

Table 2.2 Current Solids and Floatables Control Program

CSO/Diversion	Name	Type of Control	Status
0030031	Carmel Manor	Netbag	Installed
0050190	Highland Heights PS bypass	Netbag	Installed
0200069	617 Mary Ingles	Netbag	Installed
0330100	Tower Hill	Netbag	Installed
0340050	Lester Ln	Netbag	Installed
0340051	Manor Ln	Netbag	Installed
0360079	Anchor Inn	Netbag	Installed
0570011	McKinney St	Engineered S&F Control Baffle Chamber w/Bar Rack Above Baffle	Installed
0570030	Main St	Engineered S&F Control Baffle Chamber w/Bar Rack Above Baffle	Installed
0600096	O'Fallon Ave	Netbag	Installed
0600104	Van Voast Ave	Static weir	Installed
0650041	Geiger Ave	Type "B" Bar Rack	Installed
0650098	Wildcat Run	Netbag	Installed
0650084	Taylor Bottoms	Baffle	Installed
0690059	Enterprise Ave	Static weir	Installed
0730129	12th St	Static weir	Installed
0770006	Saratoga St	Static weir	Installed
0790086	4th St	Static weir	Installed
0840111	9th St	Static weir	Installed
0840112	10th St	Static weir	Installed
0840116	12th St	Static weir	Installed
0910005	Oakland Ave	Static weir	Installed
0910065	James Ave	Static weir	Installed
0910068	Oakland Ave	Static weir	Installed
0910084	Meiken/Eastern	Netbag	Installed
0930026	17th St	Baffle	Installed
0930050	19th St	Baffle	Installed

CSO/Diversion	Name	Type of Control	Status
0930066	19th St	Weir and baffle	Installed
0930106	16th St	Static weir	Installed
0960064	15th St	Netbag	Installed
1420043	10th St	Baffle	Installed
1440121	Greenup St	Engineered S&F Control Nutrient Separating Baffle Box (solids sump, screen and baffle) (solids sump, screen and baffle)	Installed
1440156	Garrard St	Engineered S&F Control Baffle Chamber (solids sump, screen and baffle)	Installed
1440207	Kennedy St	Netbag	Installed
1480116	Willow Run	Static weir	Installed
1480129	Willow Run	Static weir	Installed
1490132	Highway Ave	Static weir	Installed
1490172	Swain Ct	Netbag	Installed
1510133	Marcella Dr	Static weir	Installed
1710003	Adela St	Weir and baffle	Postponed
1850158	Church St	Weir and screen	Installed
1880090	Virginia Ave	Static weir	Installed

Church Street

The Church Street project was under construction in 2013 and 2014, and the first phase was completed in early 2015. The newly installed Church Street S&F control structure is a 12-foot long screen basket that is mounted to the top of an elevated weir, on the side of the CSO outfall. Solids and floatables are trapped in the screen as flow pours over the weir wall.

2.7 NMC #7 Pollution Prevention

The purpose of this control is to minimize various forms of pollution from entering into the CSS, and compromising the water quality of the receiving water body and/or SD1's conveyance and treatment infrastructure. As the Northern Kentucky regional storm water agency, many components of SD1's approach to pollution prevention is implemented as required by EPA National Pollutant Discharge Elimination System Phase II Municipal Separate Storm Sewer System (MS4) regulations and reported in SD1's storm water annual reports. In that regard, SD1 uses a wide-ranging approach to pollution prevention from public education and programmatic initiatives to physical efforts such as catch basin cleaning.

SD1 collected approximately 312 cubic yards of debris from catch basin cleaning activities in 2014 and approximately 360 cubic yards of grit and debris from grit pits. In addition, street sweeping operations occur on a regular basis in 21 communities throughout SD1's service area, and vary in frequency from annually to weekly..

The following sections describe some of the other major activities that demonstrate SD1's continued commitment to this minimum control.

2.7.1 Pollution Prevention Audits of SD1 Facilities

In November of 2014, SD1 performed pollution prevention audits on all of its facilities, as a requirement of the Kentucky Pollutant Discharge Elimination System (KPDES) Phase II Storm Water Permit. Facilities audited by SD1 staff include: SD1 Main Office, Employee Development Center, Dry Creek Wastewater Treatment Plant, Eastern Regional Water Reclamation Facility, Western Regional Water Reclamation Facility, and more than 130 pump stations. Additionally, pollution prevention plans were

developed for each facility, and "Pollution Prevention Tip of the Month" posters were distributed to each facility and co-permittee.

2.7.2 Public Education Programs

Public Service Park

Dedicated to those who enhance Northern Kentucky's quality of life through public service, Public Service Park is an example of SD1's leadership in water pollution prevention practices, also known as best management practices. The park is an aggressive approach to empower and educate the public on the vital importance of protecting the waterways for future generations. Featuring storm water best management practices, a wide range of green infrastructure, and cutting edge public educational programming, SD1's Public Service Park targets many audiences, ranging from the development community and water professionals, to students and the general public who can follow a self-guided tour.

SD1 conducted 13 Public Service Park tours, for 419 participants in 2014. These tours included participants from Thomas More College, Northern Kentucky University, Area 5 representatives of the Kentucky Division of Conservation the National Water Quality Monitoring Conference, the Perennial Plant Association, and local adult chaperone trainings for school field trips.

In addition to the adult tours, SD1 conducted 24 field trips for local elementary schools at SD1's Public Service Park. These field trips are an optional extension of SD1's elementary storm water and watershed curriculum that is taught in over 52 Northern Kentucky schools. In 2014, 1,711 students attended a field trip at Public Service Park. Groups attending field trips included students from public, private and independent schools as well as home school groups and scout troops.

Classroom Presentations

SD1 is committed to empowering students to protect the environment and has reached many students with interactive school presentations. SD1 uses an interactive model called Enviroscape to teach the negative impact of polluted storm water runoff on local waterways. During 2014, 65 Enviroscape lessons were taught in more than 30 schools, which reached over 1,600 students.

Public Presentations

In 2014, SD1 also participated in 28 education events and reached approximately 3,950 students and adults, beyond the formal programs covered above.

Printed Publications

SD1 published two articles in the "What's Happening Now" publication, in 2014. The articles, "Be responsible: Proper use of fertilizers and pesticides" and "Managing storm water with DRIP", both provided tips and best practices for preventing pollution in our local waterways. These articles can be found in Appendix E. The articles published in "What's Happening Now" were distributed to all residents in SD1's services area. Copies were also placed at the front counter in SD1's main office.

A 2014 phone survey of SD1's customers revealed that approximately 70 percent read the "What's Happening Now" publication. This publication will continue to be a significant piece of SD1's public education campaign due to its effective circulation and wide readership.

2.7.3 Land Disturbance/Sediment and Erosion Control

SD1's Storm Water Rules and Regulations established a land disturbance permit process, which is applicable for any land disturbance activity greater than or equal to one acre that occurs within the storm water service area. All construction activities within SD1's service area that disturb one acre of land or more in the separate system, or an area of 10,000 square feet or more in the combined system, now receive a permit from SD1 prior to the commencement of the activity. SD1's plan review process includes examination of storm water runoff from construction sites and post-construction storm water management for new developments and re-developments. Appropriate best management practices must be cited and installed properly for plans to be approved.

Post-construction storm water runoff treatment controls are required in the separate storm sewer system, as well as the combined sewer system to reduce the pollution associated with the storm water runoff. Property owners are required to enter into a long term maintenance agreement for post-construction water quality and volume reduction controls.

During 2014, SD1 issued 47 Land Disturbance Permits, 17 Grading Permits, and 4 Clearing Permits. SD1 also conducted approximately 2,800 inspections of 160 construction sites.

2.7.4 Sponsored Events

SD1 continues its partnership with the Northern Kentucky Household Hazardous Waste Action Coalition. This unique coalition is comprised of local governments and organizations and is sponsored by area businesses. SD1 serves as the chair of the coalition, which meets about quarterly.

As a way to inform the public about the proper disposal methods of household hazardous waste, SD1 worked with the Household Hazardous Waste Action Coalition to form and, more importantly, promote the website www.nkyhhw.org. The website provides viewers with disposal and recycling methods for household items, especially those considered hazardous waste. By informing people how to properly dispose of the hazardous waste, SD1 is actively influencing the community to reduce the amount of contaminants that enter the CSS.

Household Hazardous Waste Collection Event

A household hazardous waste collection event for the residents of Boone, Campbell and Kenton counties was held November 1, 2014. This event was promoted through various media outlets including: websites, flyers, an advertisement placed in the community newspapers, a column in the quarterly community publication “What’s Happening Now”, and a press release distributed to local TV news stations. More than 1,500 citizens participated in the event. Participants dropped off items such as: antifreeze, oil, lead acid batteries, paint, solvents, pesticides, electronics, fluorescent light bulbs, propane tanks, paper, and aerosol cans.

River Sweep Event

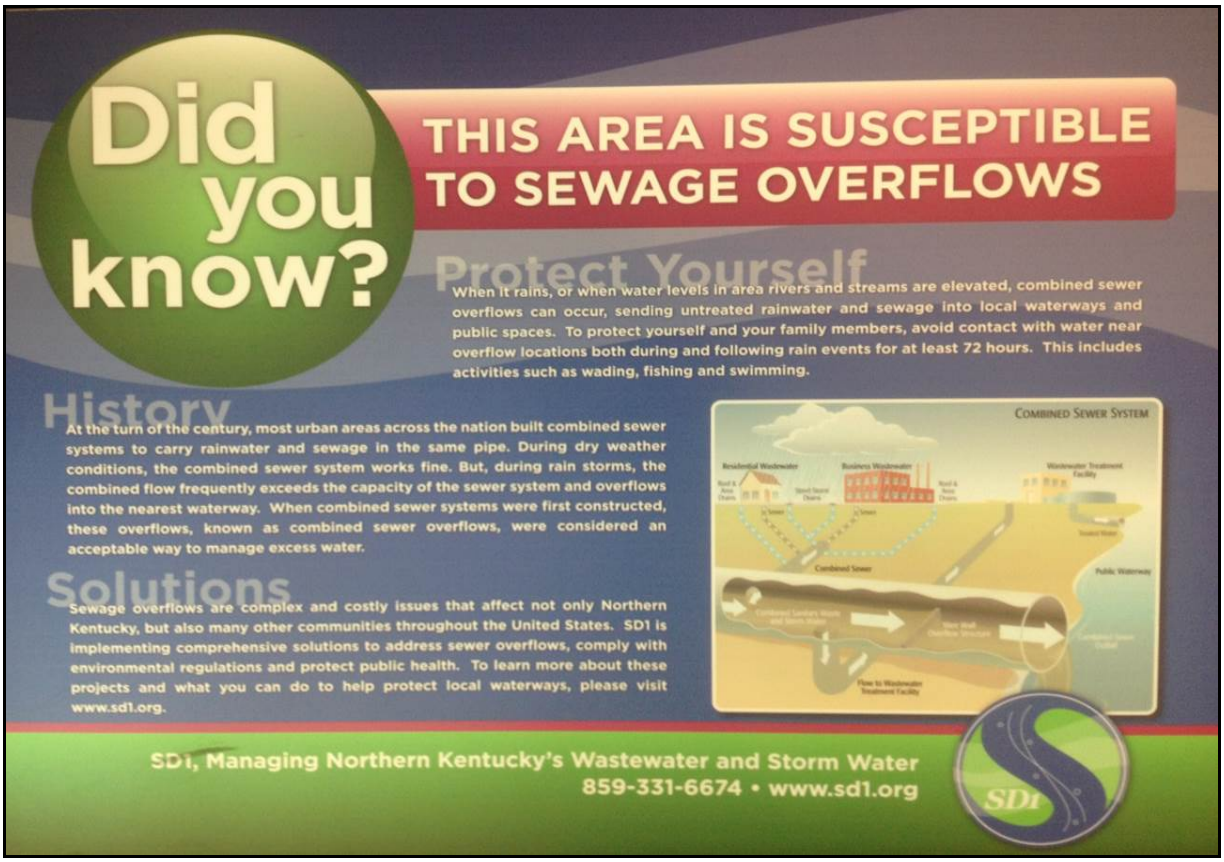
SD1 once again sponsored Ohio River Valley Water Sanitation Commission’s (ORSANCO) annual River Sweep event, which took place on June 21, 2014. More than 17,000 volunteers from public organizations, civic groups, recreational clubs and the general public in six states bordering the Ohio River came together to collect more than 500 tons of trash and other debris from the banks of the Ohio River and its tributaries.

2.8 NMC #8 Public Notification

The purpose of this control is to reduce exposure to potential health risks caused by CSOs by informing the public of the location of CSOs, the actual occurrences of CSOs, the possible health and environmental effects of CSOs, and the recreational or commercial activities curtailed as a result of CSOs.

SD1 maintains warning signage posted near CSO outfalls and public education signs located near public access to water to warn about unsafe conditions during and after rainfall events. Figure 2.8 illustrates the public education signs found in high traffic areas of Northern Kentucky.

Figure 2.8 SD1 Public Education Signs near High Traffic CSOs



Wet Weather Advisory Emails

SD1 continues to issue email wet-weather advisories to alert those who requested to be on the distribution list that weather conditions could potentially cause a CSO. There are

approximately 205 email accounts on the distribution list, which includes members of the general public, Northern Kentucky community leaders, local Water Districts, and SD1's Watershed Community Council members. Individuals can sign up to receive this e-mail notification by filling out a request form on SD1's website or by e-mailing a request to info@sd1.org. During 2014, email notifications were sent to this group on 15 occasions. SD1's website also includes other overflow related information. Electronic communications with the public on wet-weather advisories will evolve as SD1 initiates its social media program, in the coming year.

Recreational Management Tool

SD1's recreational management application Recr8OhioRiver was developed with Greater Cincinnati Metropolitan Sewer District and the ORSANCO. This website and smart phone application have been made available to inform the public about water quality around Greater Cincinnati and Northern Kentucky. Recr8OhioRiver provides predicted bacteria counts (*E.coli*) on sections of the Ohio River, based upon historical monitoring and modeling that has been conducted by the three agencies. Giving the public access to this information in real-time, especially during and after extreme wet weather allows them to make a more informed decision on whether or not they choose to recreate on the Ohio River. To date, the free Recre8OhioRIver application has been downloaded more than 2,000 times.

2.9 NMC #9 Monitoring to Characteri e CSO Impacts

The purpose of this control is to determine the occurrence and apparent impacts of CSOs through visual inspections and other simple methods, to gain an understanding on overflow occurrences and water quality problems that reflect use impairments caused by CSOs. Changes in such occurrences can provide a preliminary indication of the effectiveness of the NMC.

Field Inspections and Flow Monitoring

In 2008, SD1 completed the development of a highly calibrated system-wide hydraulic model for its collection system to be used as an accurate planning tool for capital improvements, and to provide information about the current performance of SD1's system. To ensure that the collection systems model continue to provide the most accurate information about the systems' performance, SD1's wet weather CSO and

SSO investigation crews continue to perform routine inspections during and after rain events.

As described previously, SD1's CSO investigation crew regularly inspects each CSO outfall and its associated diversions once per week or bi-weekly, as well as after wet-weather events that produce at least one half of an inch of rain. The solids & floatables controls associated with CSO diversions and outfalls are inspected routinely, as a part of the regular CSO inspections. The solids and floatable controls are cleaned on an as-needed basis. These inspections and cleanings ensure proper operation and maintenance of the diversions, as described in Section 2.1, but are also evaluated to support characterization and verification of the collection system models. Information gathered from diversion inspections is collected and stored in Lucity, which is then used to characterize the activity of CSOs during wet weather and to identify the location of dry-weather overflows and the measures needed to eliminate them from reoccurring.

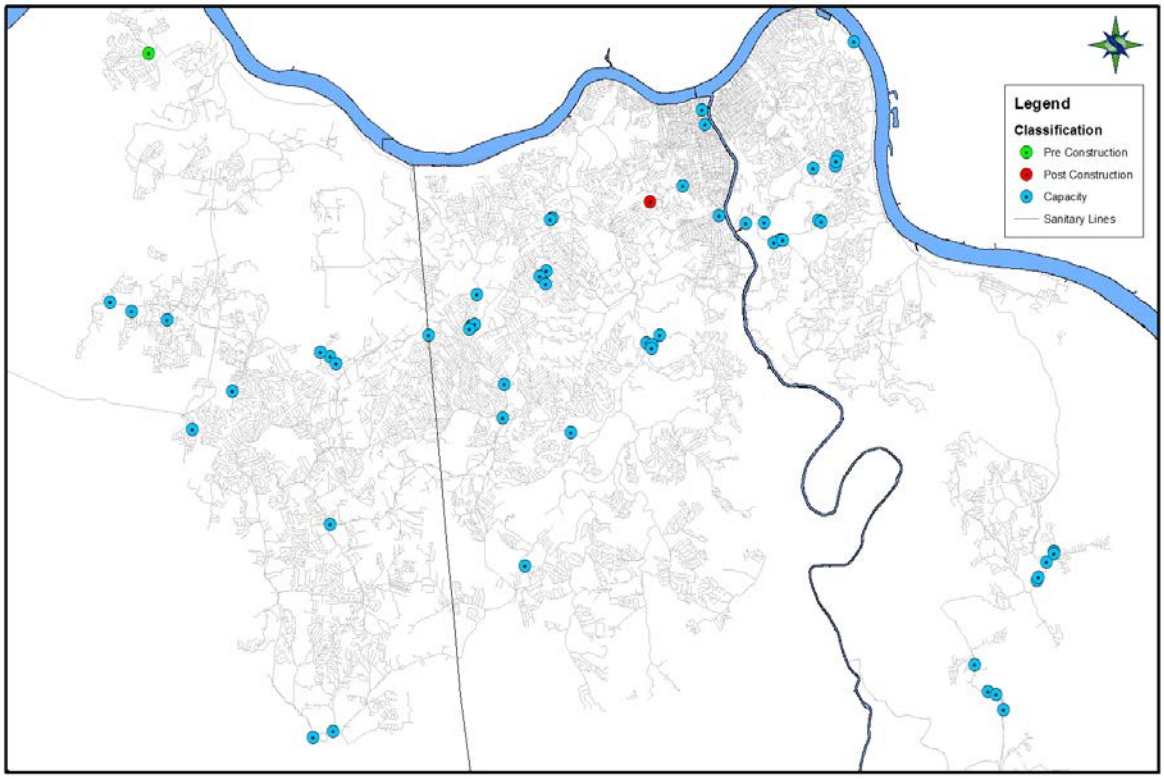
These efforts are part of SD1's on-going process of verifying the model results against actual field conditions through monitoring and observation. Over time, these field verifications will continue to improve the collection systems model to better reflect observed conditions. The ongoing recalibration of SD1's collection systems model is critical to accurately quantify CSO impacts with future water quality modeling.

SD1's flow monitoring crews are involved in a number of monitoring efforts to collect data in specific areas of the collection system to confirm model predictions, to identify and confirm areas that are suspected to have high inflow and infiltration (I/I), and to collect pre and post construction monitoring data in project areas.

During 2014, SD1 maintained approximately 62 flow monitoring locations throughout the collection system.

Figure 2.9 illustrates SD1's flow monitoring locations in 2014.

Figure 2.9 SD1 Flow Monitoring Locations in 2014



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APPENDIX A

O&M and Repair Work (2008 through 2014)

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O&M and Repair Work (2008 through 2014)								
Activity	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Total**
Combined System Structures								
Catch Basins Cleanings	1,211	888	787	1,392	1,431	1,393	**544**	7,646
Catch Basin Cleaning (Yards of Debris Removed)	N/A	427	469	525	466	630	**312**	2,829
Catch Basin Inspections	2,057	3,328	4,070	4,125	3,750	4,072	**2,971**	24,373
New Catch Basin Installation	0	5	2	2	0	5	**1**	15
Catch Basins Replaced	159	224	140	90	61	59	**28**	761
Catch Basins Repaired	128	65	78	211	38	59	**35**	614
Grit Pit Cleaning (Yards of Debris Removed)	358	439	355	365	415	408	**360**	2,700
Manholes								
Manhole Inspections	5,985	4,688	1,254	1,841	814	1,258	**182**	16,022
Manholes Repaired	485	332	320	656	407	314	**200**	2,714
Manholes Replaced	55	59	96	30	38	33	**12**	323
New Manholes Installed	26	53	39	50	49	35	**33**	285
Sewer Cleaning								
Sewer Lines Cleaned – Feet (Length of Pipe)	706,441	530,303	451,877	375,303	462,281	613,968	**641,126**	3,781,299
Sewer Inspection								
Sewer Line Initial Inspection - Feet	1,126,198	855,962	463,299	504,488	623,277	721,736	**761,720**	5,056,680
Sewer Line Follow-up Inspection – Feet	288,605	555,856	631,781	473,996	581,711	801,503	**673,824**	4,007,276
Sewer Lines Inspected - Total Feet	1,414,803	1,411,818	1,095,080	978,484	1,204,988	1,523,239	**1,435,544**	9,063,956
Sewer Line Rehab/Replacement Stats								
Sewer Lines Rehabilitated (CIPP) - Feet	953	2,251	29,528	84,717	51,100	59,137	**32,782**	260,468
Sewer Lines Repaired/Replaced - Feet	18,442	17,658	27,157	11,392	31,391	12,680	**8,323**	127,043
Misc. Sewer Line Repairs - Count	45	40	8	9	15	0	**0**	117

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APPENDIX B

SD1 Communication with Covington: Catch Basin Functionality

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SD1
Managing Northern Kentucky's Wastewater and Storm Water

June 1, 2015

Mr. Larry Klein
Covington City Manager
20 West Pike Street
Covington, KY 41011

Re: SD1's Catch Basin Functionality Assessment Program

Dear Mr. Klein,

Catch basins play an important role in SD1's efforts to manage storm water and reduce the risks of flooding, erosion and pollution in the communities we serve. SD1 routinely inspects catch basins to determine how well they are functioning and if they require any maintenance. In the past, these inspections have been limited to the area *below the grate* – the portion of the catch basin for which SD1 is responsible. However, we sometimes notice problems *above the grate* – the portion for which local municipalities are responsible.

As a courtesy to our co-permittees, SD1 is now recording above-the-grate conditions as part of its inspection program. We have compiled this data to create an online report that rates each catch basin based on a variety of factors. This is further explained in the enclosed FAQ document. We believe this report can help your agency prioritize and improve the performance of your catch basins and support your efforts to reduce the potential for neighborhood flooding.

You may access the full report to learn the location and condition of every one of your city's catch basins through the unique web link, username and password listed below.

Link: https://gis.sd1.org/flexviewers/catchbasinratings/
Username: **GISUser**
Password: **ZWkXTt7f**

As part of our routine catch basin inspections, and as a courtesy to you, SD1 performed ***2324*** above-the-grate functionality inspections, which are the responsibility of the cities and counties. Based on the ratings, ***82*** catch basins are in need of immediate attention. In addition to the catch basins requiring immediate attention, ***203*** received a below adequate rating and may require attention soon. Please refer to the City of Covington's catch basin functionality ratings for catch basins receiving a score greater than 75.

If you perform any maintenance to these catch basins, please let us know so SD1 can update our records to reflect improved conditions. You may report condition updates or

direct questions or concerns about this new program to Collection Systems Planning Supervisor Debbie Rizzo by calling 859-578-6746 or emailing drizzo@sd1.org.

Thank you for your cooperation and support as we work together to protect public health, property and the environment by providing reliable wastewater and storm water services.

Sincerely,

Debbie Rizzo
Collection Systems Planning Supervisor

Enclosure

Explanation of SD1's Catch Basin Functionality Program Rating Scale and Definitions

Catch Basin Functionality Rating Scale

Background

The catch basin functionality rating scale gives an approximation of the existing performance of a catch basin. The scale utilizes a combination of key factors to calculate the optimal function and performance of a catch basin. The catch basin performance rating scale is based on a 1 to 100 rating scale with 1 being the best and a rating of 100 score being completely nonfunctional. An example of a catch basin rating of a 1 may be representative of a recently designed and constructed catch basin with optimal contributing factors such as adequate roadway slope, appropriate curb height to direct the surface water to the opening and an adequate curb throat width available to accept the designed volume of surface water. An example of a catch basin rating of 100 may be representative of an existing catch basin with minimal to no throat width opening to allow for water to enter in combination with no adjacent curb to direct the water on a roadway with a slope exceeding 4%.

The functionality rating score is based on the ability of the catch basin to accept water. The main component of a catch basin to receive water is the available opening area of the catch basin which is determined by the throat height and width and the presence of a grate opening. Other key factors that may detract from the catch basins performance are minimal curb height, minimal to no centerline slope, steep road slopes, the presence of grass or debris obstructing the opening or diverting flow away from the basin, adjacent access ramps, buildup of asphalt overlays, etc.

Catch Basin Available Opening

The available opening area is determined by the sum of the throat area opening and 50% of the available grating area. The throat area is measured in square inches and is the product of the throat width and throat height. The grating area is measured in square inches and is the product of its length multiplied by its width and decreased by 50% to account for the loss in area due to the grating bars.

The optimal catch basin opening has a calculated minimum area of 411 in^2. This value is based on a newly installed standard size catch basin with a grate if the opening is equal to or greater than 411 in^2, the rating starts with a score of 1. A completely blocked grating will get a score of 100. Catch basins constructed with an opening less than 411 in^2 or that have partial blockages will affect the score as follows:

% Blocked	Score
0	1
<= 25%	25
<= 55%	60
<= 75%	77
<= 85%	93
100%	100

The reasoning behind this assumption is that the opening is the most important component of the catch basin functionality criteria. If the opening is greatly obstructed, such as by repeated applications of blacktop, then the catch basin would be largely nonfunctional, regardless of the values of the remaining rating criteria.

Catch Basin Functionality Factor Definitions

Once the opening score is determined, then additional points are added if any of the other key criteria are out of specifications.

Curb height: The ideal curb is considered to be 6ò high. Anything over 6ò does not enhance the score, but heights less than 6ò will adversely affect the score. The curb height is considered the next most important factor after opening area. Curb height can add up to 35% of the remaining points after the opening is calculated.

Catch Basin Throat and Grating Area: The minimum throat width standard required for roadway design is 29ò. The minimum throat height standard required for roadway design is 5ò. The area for a standard sized grate is 532 square inches. The area of the throat plus 50% of the grate area determines the total area for the openings of the catch basin *(145 in^2 + 266 in^2 = 411 in^2.* For this program we determined a standard catch basin opening to have a minimum area of 411 in^2. Oversizing the catch basin opening(s) by installing openings larger than 411 in^2 does not improve the score compared to the optimal dimensions. However, if a catch basin is going to be constructed with a throat only, and no grating, a throat larger than the standard dimensions of 29òW X 5òH can be used to improve the catch basinôs functionality rating.

Centerline Slope: The centerline slope is reported as a decimal. The ideal slope is considered to be 0.02 and negative slopes rank the same as a zero slope. A negative slope is a roadway that is sloped away from the catch basin rather than toward it. Centerline slopes greater than 0.02 do not improve the score. Centerline slope counts for up to 20% of the remaining points.

Roadway Slope: The ideal road slope is considered to be between 2% and 6%. Slopes between 0% and 2%, and slopes between 6% and 8% will negatively impact the score. Slopes between 2% and 6% will not negatively impact the score. In order to prevent scores from exceeding 100, slopes less than 0% or greater than 8% are treated as 0% or 8%, respectively. Road slope counts for up to 15% of the remaining points.

Grass and/or debris in curb line: The presence of grass or debris impedes the flow and will impact the score up to 15% of the remaining points.

Ramp in vicinity of CB: The presence of a ramp disperses the direct flow and will impact the score up to 5% of the remaining points.

Catch Basin located in radius or tangent: Location of a catch basin in a radius is considered less desirable than being located in the tangent. Location in a radius will affect up to 10% of the remaining points.

Catch Basin Functionality Inspection Scoring Example:

CB	Location	City	Insp Date	Area Score	Curb Score	Centerline Score	Road Slope Score	Grass Score	Ramp Score	Radius Score	Total Score
C08700093	3525 PARK DR.	Covington	2/26/2014	25.00	13.13	8.25	0.00	11.25	3.75	7.50	68.9

Catch Basin Condition Rating Example Pictures and Definition Schematics

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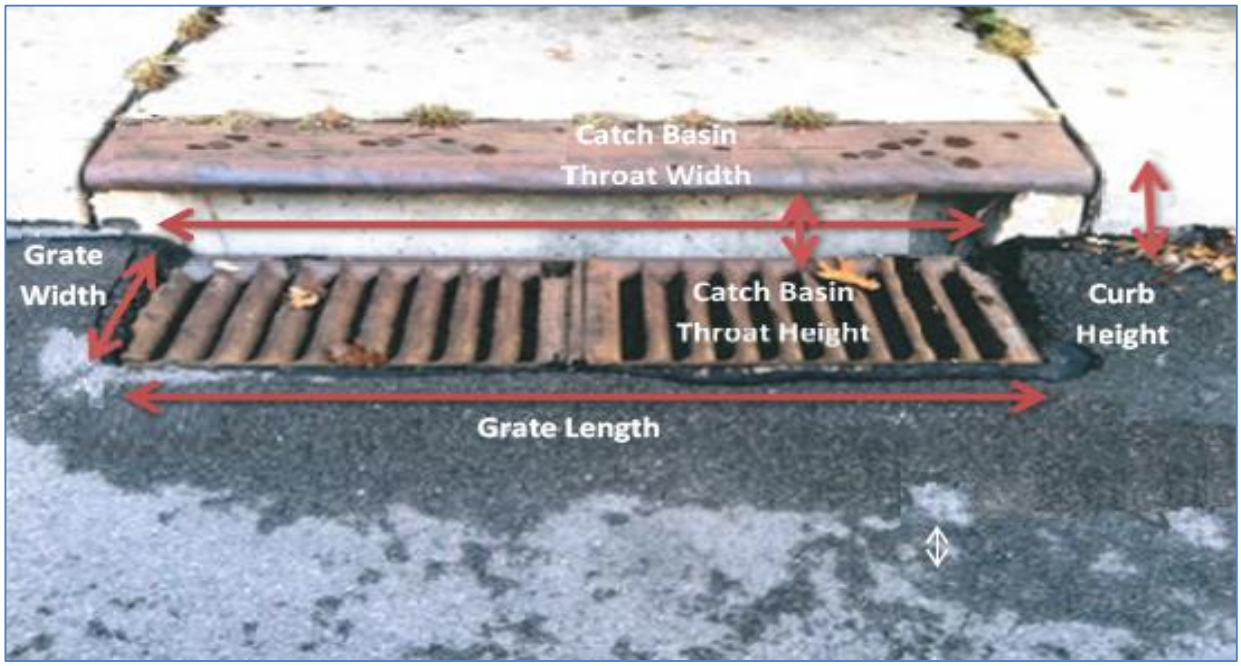
Catch Basin
Throat Width
Grate
Width
Catch Basin
Throat Height
Curb
Height
Grate Length


EMERY
DRIVE
Road Slope
Greater Than 6%
Catch Basin
Located in Tangent
Grass/Debris
In Curb Line
Catch Basin
Located in Radius


Grate Dimensions
Area = LXW X.50%
Russell St
Slope from Centerline
To Catch Basin
Centerline
Curb Height
2025

Green

Yellow

Orange

Red

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SD1
Managing Northern Kentucky's Wastewater and Storm Water

Frequently Asked Questions

Catch Basin Functionality Assessment Program

What is the catch basin functionality assessment program?

SD1 routinely inspects catch basins to determine how well they are working and whether they require maintenance. In the past, these inspections have been limited to the area *below the grate* ï the only portion of catch basin for which SD1 is responsible. However, we sometimes notice problems *above the grate* ï the portion of the catch basin for which local municipalities are responsible. With this in mind, during our regular catch basin inspections, we are now recording conditions above the grate. As a courtesy, we are compiling these above-the-grate findings into individualized reports for the communities we serve so they can better prioritize and improve the performance of their catch basins in order to reduce the potential for neighborhood flooding.

How does the rating system work?

SD1 scores each catch basin for several characteristics that factor into whether the basin is able to perform as originally intended. Scores are then compiled and coded by color:

Color	Score	Condition
Red	85-100	Poor, needs immediate attention
Orange	75-84.9	Below adequate, may require attention soon
Yellow	55-74.9	Adequate, functioning as needed
Green	1-54.9	Good, meeting performance requirements as designed
Gray	NA	City reported improvement but SD1 has not yet re-inspected

The characteristics that comprise a catch basinôs rating include the following:

- Width and height of throat opening
- Height of adjacent curb
- Road slope from centerline
- Road slope upstream/downstream
- Flatness or sag of surrounding area
- Presence of grass or debris
- Presence of ramps and driveway aprons
- Location in a radius or tangent of road
- Grate dimensions
- Road width

How do we access the report?
You may access the report online using the unique web link, username and password provided to you in the letter informing you of this new program.

What if our city can't afford to address the issues identified in the report?
We are providing you with a catch basin functionality report as a courtesy. While improving catch basins identified as high priorities may reduce the potential for flooding and other storm water problems in your community, you are not required to act on the information SD1 is providing to you.

What should we do if we improve a catch basin?
If your city improves a catch basin, you should contact Collection Systems Planning Supervisor Debbie Rizzo by phone at 859-578-6746 or by email at drizzo@sd1.org. If a city reports an improvement to SD1, we will change the catch basin's color code within the report to gray, until SD1 is able to re-inspect the catch basin.

How often will SD1 inspect our catch basins?
SD1 assesses catch basins on a two- to five-year rotation. Catch basins in the river cities may be inspected more frequently because they are part of combined sewer systems that present a higher health risk. SD1 may also reassess specific catch basins and update their functionality ratings at any time if they are involved in a trouble call response.

If we have questions, whom should we contact?
If you have any questions regarding the catch basin functionality assessment program, please contact Collection Systems Planning Supervisor Debbie Rizzo by phone at 859-578-6746 or by email at drizzo@sd1.org.

Thank you for your cooperation and support as we work together to protect public health, property and the environment by providing reliable wastewater and storm water services.

SD1's Catch Basin Functionality Ratings for the City of Covington, Kentucky

CB	Location	City	Insp Date	Area Score	Curb Score	Centerline Score	Road Slope Score	Grass Score	Ramp Score	Radius Score	Total Score
C08700444	GLENN AVE. & GRANT ST.	Covington	2/28/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C09100495	2628 JAMES AVE.	Covington	4/22/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C09200386	2445 MADISON AVE.	Covington	5/12/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C09200657	2726 MADISON AVE.	Covington	5/12/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C09700602	E. 15TH ST. & MADISON AVE.	Covington	6/2/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C09701523	E. 12TH ST. & GREENUP ST.	Covington	5/30/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C13101123	W. 23RD ST. & CENTER ST.	Covington	8/1/2014	60.00	14.00	8.00	6.00	6.00	2.00	4.00	100
C13101123A	W .23RD ST. & CENTER ST.	Covington	8/1/2014	1.00	34.65	19.80	14.85	14.85	4.95	9.90	100
C1330001	BENTON RD. & HIGHLAND AVE.	Covington	10/30/2013	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C13401308A	2500 POINTE BENTON RD. (ACROSS FROM HOUSE#648)	Covington	10/31/2013	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C14000094	W. PIKE ST. & YORK ST.	Covington	9/2/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C14000743	WATKINS ST. & FISK ST.	Covington	8/28/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C1400191	JAMES SIMPSON JR. WAY (RAIN GARDEN)	Covington	8/28/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C14500263	W. 8TH ST. & GREER AVE.	Covington	9/3/2014	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100
C14800543	723 CRESCENT AVE.	Covington	9/12/2014	93.00	2.45	1.05	0.84	1.05	0.00	0.00	98.4
C14901448	WILSON ST. & FOREST AVE.	Covington	9/16/2014	93.00	2.45	1.40	0.00	1.05	0.00	0.00	97.9
C08900113	E. 30TH ST. & FRAZIER ST.	Covington	4/11/2014	93.00	2.04	0.21	0.00	1.05	0.35	0.70	97.4
C09100177	MADISON AVE. & WALLACE AVE.	Covington	4/22/2014	93.00	1.23	0.00	0.74	1.05	0.35	0.70	97.1
C09500043	E. 18TH ST. & GARRARD ST.	Covington	5/27/2014	93.00	1.23	0.00	0.74	1.05	0.35	0.70	97.1
C13600462	LINDEN ST. & ST. CLAIR ST.	Covington	8/20/2014	93.00	1.23	0.00	0.74	1.05	0.35	0.70	97.1
C13100584	518 W. 23RD ST.	Covington	8/1/2014	93.00	1.23	0.00	1.05	1.05	0.35	0.00	96.7
C14800183	HIGHWAY AVE. & SPRING ST.	Covington	9/15/2014	93.00	1.23	0.35	1.05	1.05	0.00	0.00	96.7
C09200255	2300 MADISON AVE.	Covington	5/12/2014	93.00	1.80	0.00	0.66	1.05	0.00	0.00	96.5
C18700593	CLIFTON AVE. & ROSEDALE CT.	Covington	4/23/2014	93.00	0.82	0.07	0.84	1.05	0.00	0.70	96.5
c09700635A	E. 13TH ST. & MADISON AVE.	Covington	6/2/2014	93.00	0.82	1.05	0.00	1.05	0.35	0.00	96.3
C14500181	W. 8TH ST. & CRAIG ST.	Covington	9/3/2014	93.00	1.63	0.56	0.71	0.00	0.35	0.00	96.3
C09300314	EASTERN AVE. & E. 17TH ST.	Covington	5/15/2014	93.00	0.82	0.00	0.97	1.05	0.35	0.00	96.2
C09800444	WHEELER ST. & BYRD ST.	Covington	6/9/2014	93.00	0.82	0.00	1.02	1.05	0.35	0.00	96.2
c14702041	W. 3RD ST. & MAIN ST.	Covington	9/8/2014	93.00	0.82	0.00	0.97	1.05	0.35	0.00	96.2
c09600073	1515 OAKLAND AVE.	Covington	5/29/2014	93.00	0.82	1.26	0.00	1.05	0.00	0.00	96.1
c13700545	916 WORTH ST. & LEONARD ST.	Covington	8/26/2014	93.00	0.82	0.00	1.05	1.05	0.00	0.00	95.9
C09700364	1349 SCOTT ST.	Covington	6/2/2014	93.00	0.41	0.07	0.00	1.05	0.35	0.70	95.6
C14802532	401 WESTERN AVE. (IN SIDEWALK)	Covington	9/11/2014	93.00	0.41	0.00	0.00	1.05	0.35	0.00	94.8
C14800295	213 WESTERN AVE. (ACROSS THE STREET)	Covington	9/11/2014	93.00	0.82	0.00	0.00	0.00	0.00	0.00	93.8
C14900698	117-19 HIGH ST.	Covington	9/19/2014	77.00	8.05	0.00	3.45	3.45	1.15	0.00	93.1
c09600708	1500 COLLINS ST.	Covington	5/28/2014	77.00	8.05	0.00	3.36	3.45	1.15	0.00	93
c1870199	EUREKA ST. & EHMET DR.	Covington	4/22/2014	1.00	34.65	16.83	14.48	14.85	0.00	9.90	91.7
C08700121	3534 PARK DR.	Covington	2/26/2014	77.00	4.03	3.68	0.00	3.45	1.15	2.30	91.6
C13100321	W. 22ND ST. & CENTER ST.	Covington	8/4/2014	77.00	4.03	0.00	3.45	3.45	1.15	2.30	91.4

CB	Location	City	Insp Date	Area Score	Curb Score	Centerline Score	Road Slope Score	Grass Score	Ramp Score	Radius Score	Total Score
C09100485	2710 JAMES AVE.	Covington	4/21/2014	77.00	5.37	1.61	0.00	3.45	1.15	2.30	90.9
C13100283	W. 22ND ST. & HOWELL ST.	Covington	8/4/2014	60.00	7.00	7.60	4.05	6.00	2.00	4.00	90.6
c14200622	824 GREENUP ST.	Covington	6/11/2014	77.00	2.68	1.84	2.16	3.45	1.15	2.30	90.6
C14406146	E. 4TH ST. & GARRARD ST.	Covington	7/22/2014	77.00	4.03	0.00	2.59	3.45	1.15	2.30	90.5
C09300347	E. 17TH ST. & MARYLAND AVE.	Covington	5/15/2014	60.00	7.00	5.60	5.85	6.00	2.00	4.00	90.4
C13600771	W. 17TH ST. & HOLMAN ST.	Covington	8/19/2014	77.00	4.03	0.00	2.42	3.45	1.15	2.30	90.3
C14500253	W. 8TH ST. & GREER AVE.	Covington	9/3/2014	77.00	2.68	0.69	2.93	3.45	1.15	2.30	90.2
C09000421	ROGERS ST. & W 28TH ST.	Covington	4/18/2014	60.00	7.93	6.80	3.15	6.00	2.00	4.00	89.9
C09500713A	W. 20TH ST. & MADISON AVE.	Covington	5/23/2014	77.00	4.03	2.76	2.59	3.45	0.00	0.00	89.8
C09300294	E. 17TH ST. & GLENWAY AVE.	Covington	5/14/2014	77.00	4.03	1.61	2.16	3.45	1.15	0.00	89.4
c13401132	W. 20TH ST. & HOWELL ST.	Covington	8/11/2014	77.00	2.68	3.22	1.81	3.45	1.15	0.00	89.3
C13600545	1542 HOLMAN ST.	Covington	8/19/2014	77.00	5.37	0.00	3.36	3.45	0.00	0.00	89.2
C1340098	211 W. 20TH ST. (IN THE BACK ALLEY)	Covington	8/11/2014	25.00	26.25	12.75	9.84	11.25	3.75	0.00	88.8
C09700254	E. 13TH ST. & SCOTT ST.	Covington	6/2/2014	77.00	2.68	0.23	1.81	3.45	1.15	2.30	88.6
C14406036	128 COURT ST. (FLOOD STATION)	Covington	7/21/2014	77.00	8.05	0.00	0.00	3.45	0.00	0.00	88.5
C14500221	716 WILLARD STREET	Covington	9/3/2014	77.00	2.68	0.00	1.73	3.45	1.15	2.30	88.3
C13600316	W. 16TH ST. & MONROE ST.	Covington	8/21/2014	77.00	2.68	1.61	2.33	3.45	1.15	0.00	88.2
C08900644	26 W. 28TH ST.	Covington	4/11/2014	77.00	4.03	0.00	2.33	3.45	1.15	0.00	88
C09300942	OAKLAND AVE. & DURRETT AVE.	Covington	5/14/2014	77.00	4.03	0.00	3.02	3.45	0.00	0.00	87.5
C09700422	E. 15TH ST. & SCOTT ST.	Covington	6/2/2014	77.00	2.68	0.00	3.19	3.45	1.15	0.00	87.5
C14900388	947 JOHN ST.	Covington	9/16/2014	77.00	4.03	1.84	0.00	3.45	1.15	0.00	87.5
C18800706	4307 MCKEE AVE.	Covington	4/25/2014	77.00	4.03	0.00	3.02	3.45	0.00	0.00	87.5
C09401156	2021 SCOTT ST.	Covington	5/21/2014	77.00	2.68	1.61	2.42	3.45	0.00	0.00	87.2
C09800123	E. 12TH ST. & GARRARD ST.	Covington	6/9/2014	77.00	2.68	0.00	2.85	3.45	1.15	0.00	87.1
C08800697	28 W. 36TH ST.	Covington	4/7/2014	77.00	3.35	0.00	3.19	3.45	0.00	0.00	87
C09000283	W. 32ND ST. & GRAFF ST.	Covington	4/18/2014	60.00	9.33	0.00	5.55	6.00	2.00	4.00	86.9
C13400406	1723 MONROE ST.	Covington	8/12/2014	77.00	2.68	0.00	3.36	3.45	0.00	0.00	86.5
C18700381	E. 47TH ST. & HUNTINGTON AVE.	Covington	4/22/2014	77.00	2.68	0.00	2.16	3.45	1.15	0.00	86.4
C09701491	E. 12TH ST. & SCOTT ST.	Covington	6/2/2014	77.00	2.68	0.00	1.81	3.45	1.15	0.00	86.1
C13401203	322 W. 19TH STREET (IN THE BACK ALLEY)	Covington	8/14/2014	1.00	34.65	16.83	13.74	14.85	4.95	0.00	86
C15000967	1326 HAZEN ST.	Covington	9/22/2014	77.00	5.37	0.00	0.00	3.45	0.00	0.00	85.8
C08900384	E. 32ND ST. & DECOURSEY AVE.	Covington	4/10/2014	77.00	4.03	0.00	0.00	3.45	1.15	0.00	85.6
C09300574	1909 GLENWAY AVE.	Covington	5/14/2014	77.00	4.03	0.00	0.00	3.45	1.15	0.00	85.6
C09700244	PLEASANT ST. & SCOTT ST.	Covington	6/2/2014	77.00	4.03	1.15	0.00	3.45	0.00	0.00	85.6
C13600586	1613 EUCLID AVE.	Covington	8/21/2014	77.00	4.03	0.00	0.00	3.45	1.15	0.00	85.6
C14000371	ORCHARD ST. & LOCUST ST.	Covington	9/2/2014	77.00	4.03	0.00	0.00	3.45	1.15	0.00	85.6
c15000881	HIGHWAY AVE. & KELLY-FURNISH ST.	Covington	10/23/2014	77.00	4.03	0.00	0.00	3.45	1.15	0.00	85.6
C13400637	520 HIGHLAND AVE.	Covington	8/8/2014	77.00	2.68	0.00	2.33	3.45	0.00	0.00	85.5
C18401424	3224 WATSON AVE. (IN BACK ALLEY)	Covington	5/1/2014	1.00	34.65	19.80	10.02	14.85	4.95	0.00	85.3
C13600647	BOONE ST. & LAWN AVE.	Covington	8/20/2014	77.00	4.03	0.69	0.00	3.45	0.00	0.00	85.2
c09700201	BUSH ST. & GREENUP ST.	Covington	5/30/2014	60.00	9.33	0.00	3.75	6.00	2.00	4.00	85.1
C14900842	JOHN ST. & SHORT JOHN ST.	Covington	9/19/2014	60.00	7.00	0.00	6.00	6.00	2.00	4.00	85
c15000658	357 BOND ST.	Covington	9/24/2014	77.00	2.68	0.00	1.90	3.45	0.00	0.00	85

CB	Location	City	Insp Date	Area Score	Curb Score	Centerline Score	Road Slope Score	Grass Score	Ramp Score	Radius Score	Total Score
C14400387	W. 5TH ST. & MONTGOMERY ST.	Covington	7/29/2014	60.00	9.33	2.80	4.80	6.00	2.00	0.00	84.9
C09300944	OAKLAND AVE. & DURRETT AVE.	Covington	5/14/2014	60.00	7.00	0.00	5.85	6.00	2.00	4.00	84.8
C18501103	E. 41ST ST. & CHURCH ST.	Covington	5/6/2014	1.00	34.65	4.95	14.48	14.85	4.95	9.90	84.8
C09000073	W. 34TH ST. & ROGERS ST.	Covington	4/18/2014	60.00	7.00	0.00	5.55	6.00	2.00	4.00	84.5
c09700204	BUSH ST. & GREENUP ST.	Covington	5/30/2014	60.00	4.67	2.00	5.85	6.00	2.00	4.00	84.5
c13400405	1722 MONROE ST.	Covington	8/12/2014	60.00	7.00	4.00	5.55	6.00	2.00	0.00	84.5
C14902054	PARKWAY AVE. & WEST ST.	Covington	9/19/2014	77.00	4.03	0.00	0.00	3.45	0.00	0.00	84.5
C09500858	E. 17TH ST. & GREENUP ST.	Covington	5/27/2014	60.00	7.00	0.00	5.25	6.00	2.00	4.00	84.3
C18401376	3129 ROSINA AVE.	Covington	4/28/2014	60.00	12.60	0.00	3.75	6.00	2.00	0.00	84.3
c09700635	MADISON AVE. & E. 13TH ST. (IN THE STREET)	Covington	6/2/2014	1.00	34.65	18.81	0.00	14.85	4.95	9.90	84.2
C14500703	W. 7TH ST. & WILLARD ST.	Covington	9/3/2014	60.00	7.00	0.00	5.10	6.00	2.00	4.00	84.1
C18501082	E. 38TH ST. & LINCOLN AVE.	Covington	5/7/2014	60.00	7.00	0.00	5.10	6.00	2.00	4.00	84.1
C09100325	2234-42 EASTERN AVE.	Covington	4/21/2014	25.00	26.25	6.75	10.97	11.25	3.75	0.00	84
C14200893	BUSH ST. & GARRARD ST.	Covington	6/13/2014	60.00	4.67	3.60	3.75	6.00	2.00	4.00	84
C14800446	808 WESTERN AVE. (ACROSS THE STREET)	Covington	9/11/2014	60.00	14.00	4.00	0.00	6.00	0.00	0.00	84
C09400603	E. 20TH ST. & EASTERN AVE.	Covington	5/20/2014	25.00	26.25	2.25	7.88	11.25	3.75	7.50	83.9
C09401053	2023 PEARL ST.	Covington	5/21/2014	60.00	7.00	0.00	4.80	6.00	2.00	4.00	83.8
C13601022	W. 15TH ST. & BANKLICK ST.	Covington	8/19/2014	60.00	7.00	0.00	4.80	6.00	2.00	4.00	83.8
C13601687	306 BOONE ST.	Covington	8/20/2014	60.00	11.67	0.40	3.75	6.00	2.00	0.00	83.8
C08700275	3916 LESLIE AVE,	Covington	3/7/2014	60.00	5.25	5.20	5.10	6.00	2.00	0.00	83.5
C08910033	W. 31ST STREET & DECOURSEY AVE.	Covington	4/11/2014	77.00	5.37	0.00	0.00	0.00	1.15	0.00	83.5
C13700733	921 BAKER STREET	Covington	8/26/2014	77.00	5.37	0.00	0.00	0.00	1.15	0.00	83.5
C18800774	E. 41ST ST. & HUNTINGTON AVE.	Covington	4/24/2014	60.00	7.00	0.00	4.50	6.00	2.00	4.00	83.5
C08800092	E. 33RD ST. & FRAIZER ST.	Covington	3/25/2014	77.00	4.70	0.00	1.73	0.00	0.00	0.00	83.4
C18401121	W. 34TH ST. & GRAFF ST.	Covington	4/29/2014	60.00	5.60	0.00	5.85	6.00	2.00	4.00	83.4
C13400627	516 HIGHLAND AVE.	Covington	8/8/2014	60.00	7.00	2.80	5.55	6.00	2.00	0.00	83.3
C13600421	MAY ST. & BOONE ST.	Covington	8/20/2014	60.00	7.00	5.60	4.65	6.00	0.00	0.00	83.3
C09300914	WALLACE AVE. & GLENWAY AVE.	Covington	5/14/2014	77.00	2.68	0.00	0.00	3.45	0.00	0.00	83.1
C13300758	HIGHLAND AVE. & RAYS LANE	Covington	8/7/2014	77.00	2.68	0.00	0.00	3.45	0.00	0.00	83.1
C13700125	840 WESTERN AVE.	Covington	8/26/2014	77.00	2.68	0.00	0.00	3.45	0.00	0.00	83.1
C14000034	550 W. PIKE ST.	Covington	9/2/2014	77.00	2.68	0.00	0.00	3.45	0.00	0.00	83.1
C08800072	E. 33RD ST. & WINCHESTER AVE.	Covington	3/24/2014	60.00	8.17	0.00	4.80	6.00	0.00	4.00	83
C08800698	29 W. 36TH ST.	Covington	4/7/2014	77.00	2.68	0.00	3.36	0.00	0.00	0.00	83
C09000625	MADISON AVE. & BIRCH AVE.	Covington	4/18/2014	60.00	7.00	0.00	6.00	6.00	0.00	4.00	83
C18401123	W. 34TH ST. & GRAFF ST.	Covington	4/29/2014	25.00	13.13	12.75	9.56	11.25	3.75	7.50	82.9
C14800278	949 SPRING ST.	Covington	9/15/2014	60.00	7.00	6.00	3.75	6.00	0.00	0.00	82.8
C14400272	CRAIG ST. & KENTUCKY AVE.	Covington	7/29/2014	60.00	4.67	4.00	5.85	6.00	2.00	0.00	82.5
C14500211	WILLARD ST. & ALLEY	Covington	9/3/2014	60.00	4.67	0.00	5.85	6.00	2.00	4.00	82.5
C09800613	E. 13TH ST. & GARRARD ST.	Covington	6/10/2014	25.00	13.13	14.25	11.25	11.25	0.00	7.50	82.4
C13600285	1722 JEFFERSON AVE.	Covington	8/21/2014	60.00	9.33	0.00	5.10	6.00	2.00	0.00	82.4

CB	Location	City	Insp Date	Area Score	Curb Score	Centerline Score	Road Slope Score	Grass Score	Ramp Score	Radius Score	Total Score
C13601698	ANNS ST. & MONROE ST.	Covington	8/21/2014	60.00	2.33	4.80	3.30	6.00	2.00	4.00	82.4
C14300404	WASHINGTON AVE. & W. PIKE ST.	Covington	7/1/2014	60.00	0.00	5.60	4.80	6.00	2.00	4.00	82.4
C09100094	WALLACE AVE. & OAKLAND AVE.	Covington	4/21/2014	60.00	4.67	5.60	0.00	6.00	2.00	4.00	82.3
C09400363	E. 19TH ST. & PEARL ST.	Covington	5/22/2014	60.00	7.00	0.00	5.25	6.00	0.00	4.00	82.3
C09300904	DURRETT ST. & GLENWAY AVE.	Covington	5/14/2003	60.00	5.60	0.00	4.50	6.00	2.00	4.00	82.1
C09600283	OAKLAND AVE. & OLIVER ST.	Covington	5/29/2014	60.00	7.00	0.00	3.00	6.00	2.00	4.00	82
C14000232	W. 11TH ST. & LEE ST.	Covington	9/2/2014	60.00	4.67	7.60	3.75	6.00	0.00	0.00	82
C18800601	E. 43RD ST. & GLENN AVE.	Covington	4/24/2014	60.00	5.60	0.00	4.35	6.00	2.00	4.00	81.9
c09700203	BUSH ST. & GREENUP ST.	Covington	5/30/2014	60.00	4.67	0.00	5.10	6.00	2.00	4.00	81.8
C14000441	314 BERRY ST.	Covington	9/2/2014	60.00	7.00	1.20	5.55	6.00	2.00	0.00	81.8
C14401321	E. 5TH ST. & GREENUP ST.	Covington	7/22/2014	60.00	4.67	0.00	5.10	6.00	2.00	4.00	81.8
C14801301	W. 8TH ST. & PHILADELPHIA ST.	Covington	9/10/2014	60.00	4.67	0.00	4.80	6.00	2.00	4.00	81.5
C09700562	MADISON AVE. & MARTIN ST.	Covington	6/2/2014	25.00	13.13	11.25	9.56	11.25	3.75	7.50	81.4
C14000391	1118 HOLMAN ST. & ORCHARD ST.	Covington	9/2/2014	60.00	4.67	7.60	3.15	6.00	0.00	0.00	81.4
C0940052	EASTERN AVE. & DELMAR PL.	Covington	5/22/2014	25.00	26.25	9.00	9.84	11.25	0.00	0.00	81.3
c09701354	WOOD ST. & PLEASANT ST.	Covington	6/2/2014	1.00	34.65	0.99	14.85	14.85	4.95	9.90	81.2
C13500326	1319 HERMES STREET	Covington	8/14/2014	60.00	9.33	0.00	5.85	6.00	0.00	0.00	81.2
C09300454	E. 19TH ST. & OAKLAND AVE.	Covington	5/15/2014	60.00	2.33	6.80	5.85	6.00	0.00	0.00	81
C14800247	926 SPRING ST.	Covington	9/15/2014	60.00	7.00	0.00	6.00	6.00	2.00	0.00	81
C13100322	W. 22ND ST. & CENTER ST.	Covington	8/4/2014	60.00	4.67	0.00	4.20	6.00	2.00	4.00	80.9
C14301434	W. PIKE ST. & CRAIG ST.	Covington	7/3/2014	60.00	4.67	0.00	4.20	6.00	2.00	4.00	80.9
C13400156	1827 RUSSELL ST.	Covington	8/12/2014	60.00	7.00	0.00	5.85	6.00	2.00	0.00	80.8
C13700562	927 LEONARD ST.	Covington	8/26/2014	60.00	14.00	0.00	4.80	0.00	2.00	0.00	80.8
C09700271	E. 13TH ST. & WOOD ST.	Covington	6/2/2014	60.00	4.67	4.00	0.00	6.00	2.00	4.00	80.7
C12900088	HIGHLAND AVE. & E. HENRY CLAY (IN THE DITCH LINE)	Covington	7/31/2014	1.00	34.65	19.80	10.40	14.85	0.00	0.00	80.7
C18800233	E. 45TH ST. & NEVADA AVE.	Covington	4/23/2014	60.00	4.67	0.00	4.05	6.00	2.00	4.00	80.7
C09800413	MARYLAND AVE. & BYRD ST.	Covington	6/9/2014	60.00	7.00	5.60	0.00	6.00	2.00	0.00	80.6
C14405207A	W. 4TH ST. & RUSSELL ST.	Covington	7/25/2014	60.00	7.00	5.60	0.00	6.00	2.00	0.00	80.6
C13700136	834 WESTERN AVE. (ACROSS THE STREET)	Covington	8/26/2014	25.00	26.25	6.75	11.25	11.25	0.00	0.00	80.5
C14000392	HOLMAN ST. & ORCHARD ST.	Covington	9/2/2014	60.00	4.67	5.60	4.20	6.00	0.00	0.00	80.5
C14800852	FRY ST. & PHILADELPHIA ST.	Covington	9/10/2014	60.00	7.00	0.00	5.55	6.00	2.00	0.00	80.5
C18400584	W. 32ND ST. & LATONIA AVE.	Covington	4/30/2014	60.00	3.27	0.00	5.25	6.00	2.00	4.00	80.5
C14303451	257 W. PIKE ST.	Covington	7/3/2014	60.00	9.33	0.00	5.10	6.00	0.00	0.00	80.4
C14400274	CRAIG ST. & KENTUCKY AVE.	Covington	7/29/2014	60.00	4.67	5.20	4.50	6.00	0.00	0.00	80.4
c13100613	2417 WARREN ST.	Covington	8/1/2014	60.00	7.00	0.00	5.25	6.00	2.00	0.00	80.3
C1430036	502-28 SCOTT ST. (INBACK ALLEY)	Covington	7/2/2014	1.00	34.65	16.83	12.99	14.85	0.00	0.00	80.3
C18400421	2744 DAKOTA AVE.	Covington	5/1/2014	60.00	9.33	0.00	3.00	6.00	2.00	0.00	80.3
C08700634	E. 39TH ST. & HUNTINGTON AVE.	Covington	3/7/2014	60.00	5.83	2.40	0.00	6.00	2.00	4.00	80.2
c09600848	1558 EASTERN AVE.	Covington	5/27/2014	60.00	4.67	3.20	4.20	6.00	2.00	0.00	80.1
C08900756	JAMES AVE. (AT ASHLAND OIL CO.)	Covington	4/11/2014	60.00	14.00	0.00	0.00	6.00	0.00	0.00	80
C13600896	1615 BANKLICK ST.	Covington	8/19/2014	60.00	4.67	4.80	4.50	6.00	0.00	0.00	80

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C14800845	926 PHILADELPHIA ST.	Covington	9/10/2014	60.00	7.00	0.00	4.95	6.00	2.00	0.00	80
C13100563	W. 23RD ST. & WARREN ST.	Covington	8/1/2014	60.00	2.33	0.00	5.55	6.00	2.00	4.00	79.9
c09400173	E. 19TH ST. & MARYLAND ST.	Covington	5/22/2014	60.00	7.00	0.00	4.80	6.00	2.00	0.00	79.8
C13500176	W. 11TH ST. & HERMES AVE.	Covington	8/15/2014	60.00	7.00	6.80	0.00	6.00	0.00	0.00	79.8
C13600774	W. 17TH ST. & HOLMAN ST.	Covington	8/19/2014	60.00	7.00	0.00	4.80	6.00	2.00	0.00	79.8
C13601565	1606 MONROE ST.	Covington	8/21/2014	60.00	4.67	3.20	3.90	6.00	2.00	0.00	79.8
c13700456	953 WESTERN AVE.	Covington	8/25/2014	60.00	4.67	6.00	3.15	6.00	0.00	0.00	79.8
c13400565	1836 JEFFERSON ST.	Covington	8/12/2014	60.00	9.33	0.00	4.35	6.00	0.00	0.00	79.7
C14600283	WINDING WAY & JEROME AVE.	Covington	9/4/2014	1.00	34.65	13.86	10.40	14.85	4.95	0.00	79.7
C14000793	W. 13TH ST. & HOLMAN ST.	Covington	8/27/2014	60.00	2.33	1.20	4.05	6.00	2.00	4.00	79.6
C08800373	PARK AVE. & E. SOUTHERN AVE.	Covington	4/7/2014	60.00	2.33	0.00	5.10	6.00	2.00	4.00	79.4
C09800376	1321 MARYLAND AVE.	Covington	6/9/2014	60.00	9.33	0.00	4.05	6.00	0.00	0.00	79.4
C13401102	2025-A FRANKLIN ST.	Covington	8/11/2014	1.00	28.88	14.85	14.85	14.85	4.95	0.00	79.4
C08800374	PARK AVE. & E. SOUTHERN AVE.	Covington	4/7/2014	60.00	7.00	0.00	4.35	6.00	2.00	0.00	79.3
C1350007	634 W. 12TH ST. (IN THE BACK ALLEY)	Covington	8/15/2014	1.00	34.65	13.86	10.02	14.85	4.95	0.00	79.3
C09000775	2736 INDIANA AVE.	Covington	4/18/2014	60.00	8.17	0.00	3.00	6.00	2.00	0.00	79.2
c09400512	DELMAR PL. & EASTERN AVE.	Covington	5/20/2014	60.00	4.67	2.00	4.50	6.00	2.00	0.00	79.2
c13501561	709 W. PIKE ST. (IN THE ALLEY)	Covington	8/15/2014	1.00	34.65	13.86	14.85	14.85	0.00	0.00	79.2
C09000282	W. 32ND ST. & GRAFF ST.	Covington	4/18/2014	60.00	9.33	0.00	3.75	0.00	2.00	4.00	79.1
C09700311	TREVOR ST. & SCOTT ST.	Covington	6/2/2014	60.00	7.00	0.00	0.00	6.00	2.00	4.00	79
c13400591	497 HAWTHORNE ST. (ACROSS THE STREET)	Covington	8/12/2014	60.00	7.00	0.00	6.00	6.00	0.00	0.00	79
C13400604	509 HAWTHORNE ST.	Covington	8/12/2014	25.00	26.25	9.00	0.00	11.25	0.00	7.50	79
C13600881	W. 17TH ST. & BANKLICK ST.	Covington	8/19/2014	1.00	28.88	4.95	14.48	14.85	4.95	9.90	79
C14900371	WILSON ST. & JOHN ST.	Covington	9/16/2014	60.00	7.00	0.00	0.00	6.00	2.00	4.00	79
C18800553	4331 VERMONT AVE.	Covington	4/24/2014	25.00	13.13	14.25	7.88	11.25	0.00	7.50	79
c13400321	HOWELL ST. & W. 21TH ST.	Covington	8/11/2014	60.00	7.00	0.00	3.75	6.00	2.00	0.00	78.8
c13700342	817 MONTAGUE RD. & MILTON ST.	Covington	8/26/2014	60.00	4.67	0.00	6.00	6.00	2.00	0.00	78.7
C13700511	LEWIS ST. & WORTH ST.	Covington	8/25/2014	60.00	4.67	0.00	6.00	6.00	2.00	0.00	78.7
C14900292	PARKWAY AVE. & HIGHWAY AVE.	Covington	9/19/2014	60.00	2.33	0.00	4.35	6.00	2.00	4.00	78.7
C08800581	3526-3532 CHURCH ST.	Covington	3/31/2014	60.00	5.83	0.00	4.80	6.00	2.00	0.00	78.6
C13600278	1701 JEFFERSON AVE.	Covington	8/21/2014	60.00	4.67	0.00	5.85	6.00	2.00	0.00	78.5
C14200317	702 GREENUP ST.	Covington	6/12/2014	60.00	7.00	0.00	5.55	6.00	0.00	0.00	78.5
C13700382	W. 12TH ST. & DIXIE HWY.	Covington	8/26/2014	60.00	4.67	0.00	5.70	6.00	2.00	0.00	78.4
C18501124	E. 40TH ST. & CHURCH ST.	Covington	5/6/2014	25.00	13.13	14.25	7.31	11.25	0.00	7.50	78.4
C08800481	3418 LINCOLN AVE.	Covington	4/2/2014	60.00	5.83	0.00	4.50	6.00	2.00	0.00	78.3
C13100574	W. 23RD ST. & BUSSE ST.	Covington	8/1/2014	60.00	2.33	2.00	6.00	6.00	2.00	0.00	78.3
c08900677	38 W. 28TH ST.	Covington	4/11/2014	60.00	7.00	0.00	3.15	6.00	2.00	0.00	78.2
C09300453	E. 19TH ST. & OAKLAND AVE.	Covington	5/15/2014	60.00	2.33	4.80	5.10	6.00	0.00	0.00	78.2
C15000462	ALTAMONT RD. & BELLEVUE ST.	Covington	9/24/2014	60.00	7.00	1.20	0.00	6.00	0.00	4.00	78.2
c09100086	2225 OAKLAND AVE.	Covington	4/21/2014	60.00	7.93	0.00	4.05	6.00	0.00	0.00	78
C13600755	W. 18TH ST. & HOLMAN ST.	Covington	8/19/2014	60.00	7.00	0.00	3.00	6.00	2.00	0.00	78

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C09400034	E. 18TH ST. & EASTERN AVE.	Covington	5/20/2014	60.00	4.67	0.00	5.25	6.00	2.00	0.00	77.9
C09800412	MARYLAND AVE. & BYRD ST.	Covington	6/9/2014	60.00	4.67	0.00	5.25	6.00	2.00	0.00	77.9
C14000783	HOLMAN ST. & WATKINS ST.	Covington	8/27/2014	60.00	4.67	1.20	0.00	6.00	2.00	4.00	77.9
C14402451A	GARRARD ST. & E. 3RD ST.	Covington	7/22/2014	60.00	7.00	0.40	4.50	6.00	0.00	0.00	77.9
C14500242	W. 8TH ST. & WILLARD ST.	Covington	9/3/2014	25.00	8.75	11.25	10.41	11.25	3.75	7.50	77.9
C18700505	4524 DECOURSEY AVE.	Covington	4/23/2014	60.00	3.27	0.80	5.85	6.00	2.00	0.00	77.9
C13600483	BOONE ST. & WOODBURN AVE.	Covington	8/20/2014	60.00	4.67	0.00	5.10	6.00	2.00	0.00	77.8
C13600996	1511 BANKLICK ST.	Covington	8/19/2014	60.00	7.00	0.00	4.80	6.00	0.00	0.00	77.8
C08700662	E. 39TH ST. & PARK AVE.	Covington	3/7/2014	60.00	11.67	0.00	0.00	0.00	2.00	4.00	77.7
C09000183	W. 31ST ST. & CAROLINE ST.	Covington	4/18/2014	60.00	4.67	0.00	3.00	6.00	0.00	4.00	77.7
C09400031	E.18TH ST. & EASTERN AVE.	Covington	5/20/2014	60.00	4.67	0.00	4.95	6.00	2.00	0.00	77.6
C18500902	E. 41ST ST. & CHURCH ST.	Covington	5/6/2014	1.00	34.65	2.97	9.28	14.85	4.95	9.90	77.6
C09400021	E. 19TH ST. & EASTERN AVE.	Covington	5/20/2014	60.00	7.00	0.00	4.50	6.00	0.00	0.00	77.5
C09800474	KENDALL ST. & BYRD ST.	Covington	6/9/2014	60.00	4.67	0.00	4.80	6.00	2.00	0.00	77.5
C13700554	918 LEONARD ST.	Covington	8/26/2014	60.00	7.00	0.00	4.50	6.00	0.00	0.00	77.5
C14801228	W. 8TH ST. & DALTON AVE.	Covington	9/10/2014	25.00	26.25	0.75	10.41	11.25	3.75	0.00	77.4
C14300688	102 W. 8TH ST.	Covington	6/23/2014	60.00	0.00	6.80	4.50	6.00	0.00	0.00	77.3
C09200708	19 STERRETT AVE.	Covington	5/9/2014	60.00	4.67	0.00	4.50	6.00	2.00	0.00	77.2
C09401143A	E. 20TH ST. & SCOTT ST.	Covington	5/21/2014	60.00	4.67	0.00	4.50	6.00	2.00	0.00	77.2
C09600824	WHEELER ST. & MARYLAND AVE.	Covington	5/29/2014	1.00	34.65	11.88	0.00	14.85	4.95	9.90	77.2
C13600765	1720 HOLMAN ST.	Covington	8/19/2014	60.00	7.00	0.00	4.20	6.00	0.00	0.00	77.2
C13600966	1543 BANKLICK ST.	Covington	8/19/2014	60.00	7.00	0.00	4.20	6.00	0.00	0.00	77.2
C14400732	MADISON AVE. & RIVERCENTER BLVD.	Covington	7/24/2014	60.00	7.00	4.00	4.20	0.00	2.00	0.00	77.2
C09200305	30 CATALPA ST.	Covington	5/9/2014	60.00	7.00	2.00	0.00	6.00	2.00	0.00	77
C09700532	W. 14TH ST. & NEAVE ST.	Covington	6/2/2014	60.00	7.00	0.00	4.05	6.00	0.00	0.00	77
c13400993	2009 HOWELL ST.	Covington	8/11/2014	60.00	4.67	0.00	4.35	6.00	2.00	0.00	77
C09100471	2716 JAMES AVE.	Covington	4/21/2014	60.00	3.27	7.60	0.00	6.00	0.00	0.00	76.9
C13500137	618 W.12TH STREET	Covington	8/15/2014	60.00	7.00	0.00	3.90	6.00	0.00	0.00	76.9
C14200681	702 GREENUP ST.	Covington	6/12/2014	60.00	4.67	3.20	3.00	6.00	0.00	0.00	76.9
C13400155	1829 RUSSELL ST. (ACROSS THE STREET)	Covington	8/12/2014	60.00	7.00	0.00	3.75	6.00	0.00	0.00	76.8
C08700132	PARK & E PARK DR.	Covington	2/26/2014	60.00	2.33	4.40	0.00	6.00	0.00	4.00	76.7
C08700237	598 E. 38TH ST.	Covington	3/7/2014	60.00	4.67	0.00	4.05	6.00	2.00	0.00	76.7
C09400523	EASTERN AVE. & DELMAR PL.	Covington	5/20/2014	60.00	4.67	0.00	0.00	6.00	2.00	4.00	76.7
C09600511	PATTON ST. & GARRARD ST.	Covington	5/28/2014	60.00	4.67	0.00	0.00	6.00	2.00	4.00	76.7
C13700126	840 WESTERN AVE. (ACROSS THE STREET)	Covington	8/26/2014	60.00	4.67	0.00	6.00	6.00	0.00	0.00	76.7
C14000792	W. 13TH ST. & HOLMAN ST.	Covington	8/27/2014	60.00	4.67	0.00	0.00	6.00	2.00	4.00	76.7

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C14300194	PIKE ST. & SCOTT ST.	Covington	7/1/2014	60.00	4.67	0.00	0.00	6.00	2.00	4.00	76.7
C14300502A	MADISON AVE. & E. 9TH ST.	Covington	6/23/2014	60.00	4.67	0.00	4.05	6.00	2.00	0.00	76.7
c14405882A	W. 4TH ST.	Covington	7/25/2014	60.00	4.67	0.00	4.05	6.00	2.00	0.00	76.7
C18401063	SOUTHERN AVE. & EUQENIA AVE.	Covington	4/29/2014	60.00	4.67	0.00	0.00	6.00	2.00	4.00	76.7
C18800705	4310 MCKEE AVE.	Covington	4/25/2014	60.00	4.67	0.00	6.00	6.00	0.00	0.00	76.7
C18800764	E. 42ND ST. & HUNTINGTON AVE.	Covington	4/24/2014	60.00	4.67	0.00	0.00	6.00	2.00	4.00	76.7
C09200358	17 HOLMESDALE CT.	Covington	5/9/2014	60.00	4.67	0.40	5.55	6.00	0.00	0.00	76.6
C15000348	321 ALTAMONT RD.	Covington	9/24/2014	60.00	7.00	0.00	3.60	6.00	0.00	0.00	76.6
C09000034	W. 31ST ST. & ROGERS ST.	Covington	4/18/2014	60.00	7.00	0.00	3.45	6.00	0.00	0.00	76.5
C09400362	E. 19TH ST. & PEARL ST.	Covington	5/22/2014	60.00	4.67	0.00	5.85	6.00	0.00	0.00	76.5
C14000718	W. 13TH ST. & LEE ST.	Covington	8/28/2014	60.00	4.67	0.00	5.85	6.00	0.00	0.00	76.5
C14200694	E. 7TH ST. & GREENUP ST.	Covington	6/12/2014	1.00	28.88	16.83	0.00	14.85	4.95	9.90	76.4
C15000428	347 ALTAMONT RD.	Covington	9/24/2014	60.00	2.33	0.00	6.00	6.00	2.00	0.00	76.3
C18400064	HAZEL ST. & RASINA AVE.	Covington	4/28/2014	25.00	19.25	0.00	9.56	11.25	3.75	7.50	76.3
C09200425	2434 MADISON AVE.	Covington	5/9/2014	60.00	7.00	0.00	3.15	6.00	0.00	0.00	76.2
C13500048	629 W. 11TH STREET	Covington	8/15/2014	60.00	4.67	0.00	5.55	6.00	0.00	0.00	76.2
C1490075	JOHN ST.	Covington	9/19/2014	60.00	4.67	0.00	5.55	6.00	0.00	0.00	76.2
C08900398	21-31 E. 32ND ST.	Covington	4/11/2014	60.00	4.67	0.00	5.40	6.00	0.00	0.00	76.1
C09200141	SCOTT BLVD. & STERRETT AVE.	Covington	5/9/2014	60.00	4.67	0.00	3.45	6.00	2.00	0.00	76.1
C09800233	TREVOR ST. & WHEELER ST.	Covington	6/9/2014	60.00	4.67	0.00	3.45	6.00	2.00	0.00	76.1
C18400423	2743 DAKOTA AVE.	Covington	5/1/2014	60.00	4.67	0.00	3.45	6.00	2.00	0.00	76.1
C08700445	3602 GLENN AVE.	Covington	2/28/2014	60.00	11.67	0.00	4.35	0.00	0.00	0.00	76
C13300743	801 HIGHLAND AVE.	Covington	8/7/2014	60.00	4.67	5.20	0.00	6.00	0.00	0.00	75.9
C18400276	2727 ASHLAND AVE.	Covington	5/1/2014	60.00	4.67	0.00	5.25	6.00	0.00	0.00	75.9
C1870259A	4711 VICTORY AVE.	Covington	4/23/2014	60.00	7.93	0.00	0.00	6.00	2.00	0.00	75.9
C08700536	3833 GLENN AVE.	Covington	3/4/2014	25.00	21.88	0.00	6.47	11.25	3.75	7.50	75.8
c09100085	2224 OAKLAND AVE.	Covington	4/21/2014	60.00	4.67	0.00	3.15	6.00	2.00	0.00	75.8
C09500042	E. 18TH ST. & GARRARD ST.	Covington	5/27/2014	60.00	4.67	0.00	3.15	6.00	2.00	0.00	75.8
C13600446	1537 ST. CLAIR ST.	Covington	8/20/2014	60.00	4.67	0.00	5.10	6.00	0.00	0.00	75.8
C14303431	23 W. 6TH ST.	Covington	7/1/2014	60.00	4.67	0.00	3.15	6.00	2.00	0.00	75.8
C14800206	923 HIGHWAY AVE.	Covington	9/15/2014	25.00	26.25	0.00	9.56	11.25	3.75	0.00	75.8
C14200721	E. 7TH ST. & SANDFORD ST.	Covington	6/12/2014	25.00	17.50	0.00	10.69	11.25	3.75	7.50	75.7
C18800793	E. 42ND ST. & MCKEE ST.	Covington	4/25/2014	25.00	8.75	9.00	10.41	11.25	3.75	7.50	75.7
C09700991	W. 15TH ST. & RUSSELL ST.	Covington	6/4/2014	60.00	2.33	0.00	5.25	6.00	2.00	0.00	75.6
C13400478	412 HAWTHORNE ST. (ACROSS THE STREET)	Covington	8/12/2014	60.00	4.67	0.00	4.95	6.00	0.00	0.00	75.6
C13100632B	2426 WARREN ST.	Covington	8/1/2014	60.00	4.67	0.00	4.80	6.00	0.00	0.00	75.5
C13300084	812 HIGHLAND AVE.	Covington	8/7/2014	60.00	4.67	4.80	0.00	6.00	0.00	0.00	75.5
C13400593	505 HAWTHORNE ST.	Covington	8/12/2014	60.00	2.33	3.20	0.00	6.00	0.00	4.00	75.5
C14400362	W. 5TH ST. & RUSSELL ST.	Covington	7/29/2014	1.00	17.33	14.85	12.62	14.85	4.95	9.90	75.5
c09700261	E. 13TH ST. & SCOTT ST.	Covington	6/2/2014	60.00	7.00	0.40	0.00	6.00	2.00	0.00	75.4
C08801114	E. 35TH ST. & CHURCH ST.	Covington	3/31/2014	60.00	9.33	0.00	0.00	0.00	2.00	4.00	75.3
C09700972	W. 14TH. ST. & RUSSELL ST.	Covington	6/4/2014	60.00	4.67	0.00	4.50	6.00	0.00	0.00	75.2
C13300091	797 HIGHLAND AVE. (ACROSS THE STREET)	Covington	8/7/2014	60.00	4.67	4.40	0.00	6.00	0.00	0.00	75.1
C08900273	17 W. 30TH ST.	Covington	4/11/2014	60.00	7.00	0.00	0.00	6.00	2.00	0.00	75
C09200144	SCOTT BLVD. & STERRETT AVE.	Covington	5/9/2014	60.00	7.00	0.00	0.00	6.00	2.00	0.00	75
C13400657	602 HIGHLAND AVE.	Covington	8/8/2014	60.00	7.00	0.00	0.00	6.00	2.00	0.00	75

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APPENDIX C

CSO Inspection Routes

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2013 CSO Inspection Routes

Diversion Inspections - Western Route	Dry Weather Inspection Fre uency	Wet Weather Inspection Fre uency
STEVE TANNER -1730053	Weekly	After 1/2" of Rain
KENNER ST - 1710054	Weekly	After 1/2" of Rain
BUTLER ST - 1710068	Weekly	After 1/2" of Rain
SWAIN CT - 1490015	Weekly	After 1/2" of Rain
WRIGHT ST - 1480017	Weekly	After 1/2" of Rain
320 CRESENT AVE - 1480103	Weekly	After 1/2" of Rain
3RD ST and I-75 - 1480097	Weekly	After 1/2" of Rain
4TH ST and I-75 - 1480108	Weekly	After 1/2" of Rain
WILLOW RUN - 1480116	Weekly	After 1/2" of Rain
AMSTERDAM and PARKVALE - 1380054	Weekly	After 1/2" of Rain
AMSTERDAM and ARLINGTON - 1380083	Weekly	After 1/2" of Rain
DIXIE HWY and ARLINGTON - 1320093	Weekly	After 1/2" of Rain
PARK HILLS and DIXIE HWY - 1350104	Weekly	After 1/2" of Rain
MARCELLA DR - 1510133	Weekly	After 1/2" of Rain
PHILADEPHIA ST - 1470003	Weekly	After 1/2" of Rain
BAKEWELL ST - 1470032	Weekly	After 1/2" of Rain
MAIN ST - 1470052	Weekly	After 1/2" of Rain
JOHNSON ST - 1470072	Weekly	After 1/2" of Rain
2ND and RUSSELL - 1440002	Weekly	After 1/2" of Rain
2ND and WASHINGTON - 1440053	Weekly	After 1/2" of Rain
MADISON AVE - 1440072	Weekly	After 1/2" of Rain
SCOTT ST - 1440100	Weekly	After 1/2" of Rain
GREENUP ST - 1440121	Weekly	After 1/2" of Rain
GARRARD ST - 1440156	Weekly	After 1/2" of Rain
KENNEDY ST#1 - 1440145	Weekly	After 1/2" of Rain
KENNEDY ST#2 - 1440146	Weekly	After 1/2" of Rain
6TH and GARRARD 1420004	Weekly	After 1/2" of Rain
8TH and GARRARD - 1420022	Weekly	After 1/2" of Rain
8TH and SANFORD - 1420028	Weekly	After 1/2" of Rain
9TH ST - 1420032	Weekly	After 1/2" of Rain
10TH ST - 1420043	Weekly	After 1/2" of Rain
ROBBINS ST - 1420076	Weekly	After 1/2" of Rain
13TH ST - 0980016	Weekly	After 1/2" of Rain
MARYLAND AVE - 0980036	Weekly	After 1/2" of Rain
15TH ST - 0960003	Weekly	After 1/2" of Rain
PATTON ST - 0960032	Weekly	After 1/2" of Rain
16TH and WATER ST - 0930014	Weekly	After 1/2" of Rain
16TH ST - 0930002	Weekly	After 1/2" of Rain
17TH ST - 0930026	Weekly	After 1/2" of Rain
GLENWAY and PARK - 0930050	Weekly	After 1/2" of Rain
S.E SIDE BALLPARK#2 - 0930066	Weekly	After 1/2" of Rain
S.E SIDE BALLPARK#1 - 0930056	Weekly	After 1/2" of Rain
20TH ST - 0930075	Weekly	After 1/2" of Rain
DURETTE AVE - 0930083	Weekly	After 1/2" of Rain
OAKLAND ST - 0910007	Weekly	After 1/2" of Rain
EASTERN AVE NORTH - 0910027	Weekly	After 1/2" of Rain
EASTERN AVE and HOLMES - 0910025	Weekly	After 1/2" of Rain
HERMAN ST - 1310052	Weekly	After 1/2" of Rain
WARREN ST #1 - 1310062	Weekly	After 1/2" of Rain
WARREN ST #2 - 1310065	Weekly	After 1/2" of Rain
Highlighted structures indicate Secondary Diversions that divert to other parts of the CSS.		

2013 CSO Inspection Routes

Diversion Inspections - Eastern Route	Dry Weather Inspection Fre uency	Wet Weather Inspection Fre uency
33RD and LATONIA - 1840055	Weekly	After 1/2" of Rain
33RD and EMERSON - 1840072	Weekly	After 1/2" of Rain
33RD and CARLISLE - 1840069	Weekly	After 1/2" of Rain
CHURCH NORTH - 1850150	Weekly	After 1/2" of Rain
CHURCH WEST - 1850024	Weekly	After 1/2" of Rain
CHURCH EAST - 1850032	Weekly	After 1/2" of Rain
DECOURSEY - 1870025	Weekly	After 1/2" of Rain
VIRGINIA - 1880021	Weekly	After 1/2" of Rain
BALTIMORE - 1880028	Weekly	After 1/2" of Rain
44TH ST - 1880010	Weekly	After 1/2" of Rain
E38TH ST #1- 0870021	Weekly	After 1/2" of Rain
E38TH ST #2 - 0870019	Weekly	After 1/2" of Rain
EARL and GILBERT - 0870052	Weekly	After 1/2" of Rain
SOUTHERN and MYRTLE - 0870039	Weekly	After 1/2" of Rain
SOUTHERN - 0870071	Weekly	After 1/2" of Rain
PARK DR - 0870007	Weekly	After 1/2" of Rain
34TH ST at L&N BRIDGE - 0880017	Weekly	After 1/2" of Rain
E33RD ST - 0880004	Weekly	After 1/2" of Rain
25 28TH ST - 0890063	Weekly	After 1/2" of Rain
ASHLAND OIL - 0910064	Weekly	After 1/2" of Rain
EASTERN and ADAMS - 0910039	Weekly	After 1/2" of Rain
9TH ST - 0840003	Weekly	After 1/2" of Rain
BRIETHE and LOWELL - 0840132	Weekly	After 1/2" of Rain
LOWELL and 10TH ST - 0840027	Weekly	After 1/2" of Rain
FITZSIMMONS - 0730005	Weekly	After 1/2" of Rain
12TH ST #1 - 0730009	Weekly	After 1/2" of Rain
12TH ST #2 - 0730028	Weekly	After 1/2" of Rain
4TH CHAMBER - 0820001	Weekly	After 1/2" of Rain
16TH and MONMOUTH - 0690034	Weekly	After 1/2" of Rain
ENTERPRISE RENTAL - 0690008	Weekly	After 1/2" of Rain
LESTER - 0340034	Weekly	After 1/2" of Rain
GLAZIER - 0650053	Weekly	After 1/2" of Rain
GEIGER - 0650041	Weekly	After 1/2" of Rain
SOUTH WARD and COVERT RUN - 0550024	Weekly	After 1/2" of Rain
TAYLOR&RETREAT - 0540055	Weekly	After 1/2" of Rain
DONNERMEYER and LAFAYETTE - 0540044	Weekly	After 1/2" of Rain
DONNERMEYER and BERRY - 0540009	Weekly	After 1/2" of Rain
NELSON and LINDEN - 0630039	Weekly	After 1/2" of Rain
9TH and LINDEN - 0660057 (GATEWELL)	Weekly	After 1/2" of Rain
WILDCAT DR - 0650025	Weekly	After 1/2" of Rain
PARTY SOURCE - 0650084	Weekly	After 1/2" of Rain
COLUMBIA ST CHAMBER - 0790015	Weekly	After 1/2" of Rain
WASHINGTON ST CHAMBER - 0640081	Weekly	After 1/2" of Rain
DON PABLO - 0630001	Weekly	After 1/2" of Rain
PATCHEN - 0620031	Weekly	After 1/2" of Rain
LAFAYETTE - 0620015	Weekly	After 1/2" of Rain
TAYLOR - 0610080	Weekly	After 1/2" of Rain
WASHINGTON - 0610006	Weekly	After 1/2" of Rain
FOOTE - 0600002	Weekly	After 1/2" of Rain
WARD - 0600016	Weekly	After 1/2" of Rain
VAN VOAST - 0600037	Weekly	After 1/2" of Rain
O'FALLON - 0600041	Weekly	After 1/2" of Rain
MCKINNEY - 0570115	Weekly	After 1/2" of Rain
MCKINNEY - 0570011	Weekly	After 1/2" of Rain
Main St - 0570123	Weekly	After 1/2" of Rain
MAIN ST - 0570030	Weekly	After 1/2" of Rain
ANCHOR INN - 0360018	Weekly	After 1/2" of Rain
TOWER HILL - 0330099	Weekly	After 1/2" of Rain
625 MARY INGLES - 0340044	Weekly	After 1/2" of Rain
617 MARY INGLES - 0200066	Weekly	After 1/2" of Rain
CARMEL MANOR - 0030017	Weekly	After 1/2" of Rain
ASH ST - 0010001	Weekly	After 1/2" of Rain

Highlighted structures indicate Secondary Diversions, which divert to other parts of the CSS.

2013 CSO Inspection Routes

Diversions Inspections - Consolidated Route	Dry Weather Inspection Fre uency	Wet Weather Inspection Fre uency
ROHMAN ST - 1730008	Bi-Weekly	After 1/2" of Rain
PLEASANT ST - 1730029	Bi-Weekly	After 1/2" of Rain
LAGOON ST - 1720005	Bi-Weekly	After 1/2" of Rain
ADELA ST - 1710003	Bi-Weekly	After 1/2" of Rain
CARNEAL ST - 1710084	Bi-Weekly	After 1/2" of Rain
ASH ST - 1710098	Bi-Weekly	After 1/2" of Rain
ALTAMONT ST - 1500010	Bi-Weekly	After 1/2" of Rain
PARKWAY and HIGHWAY - 1490027	Bi-Weekly	After 1/2" of Rain
320 CRESCENT ST - 1480103	Bi-Weekly	After 1/2" of Rain
3RD ST - 1480012	Bi-Weekly	After 1/2" of Rain
3RD ST at I-75 - 1480097	Bi-Weekly	After 1/2" of Rain
DALTON ST - 1480123	Bi-Weekly	After 1/2" of Rain
8TH and PHILADEPHIA - 1480129	Bi-Weekly	After 1/2" of Rain
KENNEDY ST #2 - 1440146	Bi-Weekly	After 1/2" of Rain
8TH ST - 1420025	Bi-Weekly	After 1/2" of Rain
11TH ST - 1420079	Bi-Weekly	After 1/2" of Rain
12TH ST - 0980002	Bi-Weekly	After 1/2" of Rain
OLIVER ST - 0960027	Bi-Weekly	After 1/2" of Rain
GLEWAY and PARK - 0930050	Bi-Weekly	After 1/2" of Rain
19TH ST and OAKLAND - 0930041	Bi-Weekly	After 1/2" of Rain
EASTERN AVE SOUTH - 0910031	Bi-Weekly	After 1/2" of Rain
EASTERN AVE - 0910025	Bi-Weekly	After 1/2" of Rain
OAKLAND and FLORIST - 0910005	Bi-Weekly	After 1/2" of Rain
EASTERN and MEINKEN - 0910055	Bi-Weekly	After 1/2" of Rain
ASHLAND OIL - 0910064	Bi-Weekly	After 1/2" of Rain
34TH ST and L&N BRIDGE - 0880017	Bi-Weekly	After 1/2" of Rain
47TH ST - 1870031	Bi-Weekly	After 1/2" of Rain
CHURCH ST NORTH - 1850150	Bi-Weekly	After 1/2" of Rain
LOWELL and 9TH ST - 0840005	Bi-Weekly	After 1/2" of Rain
9TH ST - 0840003	Bi-Weekly	After 1/2" of Rain
4TH ST CHAMBER - 0820001	Bi-Weekly	After 1/2" of Rain
SARATOGA (PURPLE BRIDGE) - 0770006	Bi-Weekly	After 1/2" of Rain
LAFAYETTE ST - 0620015	Bi-Weekly	After 1/2" of Rain
TAYLOR ST - 0610080	Bi-Weekly	After 1/2" of Rain
O'FALLON ST - 0600041	Bi-Weekly	After 1/2" of Rain
MC KINNEY - 0570115	Bi-Weekly	After 1/2" of Rain
EARL&GILBERT - 0870052	Bi-Weekly	After 1/2" of Rain

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APPENDIX D

KDEP/EPA Letter Dated November 24, 2014

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STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 FAIR OAKS LANE
FRANKFORT KENTUCKY 40601
www.kentucky.gov

November 24, 2014

CERTIFIED MAIL 7012 2920 0001 0746 6290
RETURNED RECEIPT REQUESTED

David Rager
Executive Director
Sanitation District No. 1 of Northern Kentucky
1045 Eaton Drive
Ft. Wright, Kentucky 41017

Re: KDEP/EPA Demand for Stipulated Penalties
Consent Decree Number: 2:05-CV-199-WOB

Dear Mr. Rager:

The Kentucky Department for Environmental Protection (KDEP) and the United States Environmental Protection Agency (EPA), Region 4 upon review of Quarterly Reports submitted by Sanitation District No. 1 (SD1) for reporting periods from July 1, 2010 to June 30, 2014, has determined that fifteen (15) Dry Weather Overflows (DWOs) have occurred from SD1's combined sewer system during these reporting periods. Of the 15 DWOs, four were considered probable Force Majeure events pursuant to Paragraph 61 of the Consent Decree.

A total of eleven (11) DWOs reported in Quarterly Reports from July 1, 2010 to June 30, 2014, are considered for Stipulated Penalties, including:

1. Quarterly Report No.12 (July – September 2010), 1 DWO
   McKinney CSO Diversion Structure; ID# 0570011; date of occurrence, July 1, 2010; estimated volume, 5,100 gallons.

2. Quarterly Report No. 13 (October –December 2010), 2 DWOs
   McKinney Street CSO Diversion Structure; ID# 0570011; date of occurrence, November 1, 2010; estimated volume, 213,250 gallons.
   Adela Street CSO Diversion Structure; ID# 171003; date of occurrence, December 31, 2010; estimated volume, 5,700 gallons.

3. Quarterly Report No. 16 (July – September 2011), 1 DWO
Patton Street CSO Diversion Structure; ID# 0930105; date of occurrence, July 14, 2011; estimated volume, 1,790,000 gallons.

4. Quarterly Report No. 18 (October – December 2011), 2 DWOs
East 38th Street CSO Diversion Structure; ID# 0870021; date of occurrence, February 6, 2011, estimated volume, 2,200 gallons.
Lester Lane CSO Diversion Structure; ID# 0340034; date of occurrence, February 6, 2011, estimated volume, 96,150 gallons.

5. Quarterly Report No. 19 (April – June 2012); 1 DWO
Kennedy Street CSO Diversion Structure; ID# 0870021; date of occurrence, February 6, 2011; estimated volume, 400 gallons.

6. Quarterly Report No. 21 (October – December 2012); 1 DWO
Carneal Street CSO Diversion Structure; ID# 1710084; date of occurrence, December 17, 2012; estimated volume, 2,100 gallons.

7. Quarterly Report No. 22 (January – March 2013); 1 DWO
O'Fallon Avenue CSO Diversion Structure; ID# 0600041; date of occurrence, January 10, 2013; estimated volume, 1,200 gallons.

8. Quarterly Report No. 24 (July – September 2013); 2 DWOs
Rohman Street CSO Diversion Structure; ID# 0730008; date of occurrence, August 3, 2013; estimated volume, 1,525 gallons.
Glenn Street CSO Diversion Structure; ID# 0870052; date of occurrence, August 18, 2013; estimated volume, 425 gallons.

Pursuant to Section X, Paragraph 54(a) of the Consent Decree, KDEP and EPA may assess a stipulated penalty of $2,000.00 for each DWO occurring after April 18, 2009. Stipulated penalties of $30,000.00 can thus be assessed for the 15 DWO that have occurred from July 1, 2010 to June 30, 2014. However, KDEP and EPA have taken into account the documents presented by SD1 that details the circumstances concerning the reported DWOs and, as a result, have decided to exercise enforcement discretion to not demand the full amount of stipulated penalties that could be assessed. Therefore, after review of the submitted documentation, KDEP and EPA hereby demand stipulated penalties pursuant to Section X, Paragraph 54(a) of $22,000.00.

In accordance with Section X, Paragraph 55 of the Consent Decree, SD1 shall pay within thirty (30) days of receipt of this demand notice $11,000.00 (50%) of the stipulated penalties to the Commonwealth of Kentucky and $11,000.00 (50%) of the stipulated penalties to the United States for a total of $22,000.00. Instructions for penalty payments to the Commonwealth of Kentucky can be found on Section XI, Paragraph 57 of the Consent Decree. Electronic funds transfer wiring instructions for the payment to the United States are enclosed.

If there are any questions, you may contact Mr. Maurice Horsey, Chief of the Municipal and Industrial Enforcement Section, EPA Region 4 at (404) 562-9764 or Mr. Jeff Cummins, Director, Division of Enforcement, KDEP at (502) 564-2150.

Sincerely,

Jeffrey Cummins, Director
Division of Enforcement
KY Department for Environmental Protection

Denisse Diaz, Chief
NPDES Permitting and Enforcement Branch
Water Protection Division

Enclosure

ENCLOSURE

Re: Wiring Instructions for Payment of Stipulated Penalties to the United States

For payment amounts less than $50,000 the Department of Justice recommends Pay.Gov. The brochure with the instructions for Pay.Gov is attached to this email. The file number that should be referenced is 2007A17812. If you have any questions you may contact Ms. Lynne Woodrum of the Financial Litigation Unit of the US Attorneys Office as provided below. Online payment instructions are attached for Pay.Gov.

Lynne Woodrum
Paralegal Specialist
Financial Litigation Unit
United States Attorney's Office
Eastern District of Kentucky
859-685-4864

Pay.Gov ACH Authorization Request (Mail this portion)

Name: _____

Social Security Number (Last 4 #'s required):_____

DOJ CDCS Number: _____

Email Address (if you'd like a confirmation email:

_____

I authorize my bank to automatically deduct my federal debt payment for $_____ . I authorize them to deduct this amount: ____weekly ____bi-weekly ____monthly on the ____ day of each month from my checking or savings account. I agree that I may be charged a Returned Item Fee if the funds are not available at the time of the scheduled Payment Due Date. By submitting this form, I agree to the terms and conditions stated on it, and that the information provided is true and correct.

I understand that I must make regular monthly payments until I am notified that my authorization form has been approved. If at any time I decide to discontinue Pay.Gov ACH, I will provide at least 30 days written notice, faxed to the NCIF at 202-532-4383, or mailed to the address below.

Account Type:

____Personal Checking ____Personal Savings

____Business Checking ____Business Savings

Bank Name: _____

Account Holder's Name:

_____

Bank Routing # (first 9 digits on bottom of your check):

_____

Checking/Savings Account #: _____

Account Holder's Signature:

_____

Date Signed: _____

Return this form and voided check or savings account deposit slip to:

U. S. Department of Justice
Nationwide Central Intake Facility
Attn: Pay.Gov Processing
P. O. Box 56720
Washington, DC 20035
Fax: 202-532-4383

Don't Have Internet?

We can help!

We can set you up for recurring payments. Please fill out the Pay.Gov ACH Authorization Request form on the left.

If you have any questions about accessing Pay.gov, please, contact your local collection office.

Pay your debt online.

Read this brochure to find out how.

U. S. Department of Justice

Nationwide Central Intake Facility
P. O. Box 56720
Washington, DC 20035

On-line Payment services using Pay.Gov

Phone: 800-683-6567
Fax: 202-532-4383
E-mail: NCIF@usdoj.gov

Pay.gov
FINANCIAL MANAGEMENT SERVICE

What is Pay.Gov?

Pay.gov is a secure Government website that allows you to submit payments for your federal debt(s) electronically. Pay.gov is managed by the Department of Treasury, Financial Management Service.

Benefits?

No more paper. No mail delay. Submit your payments on-line. Make a payment anytime and anywhere with Internet access. The Pay.gov site is available 24 hours a day, 7 days a week (holidays included) for users to submit payments.

Ways to Pay your debt?

- **Credit Card**. pay one payment at a time. We accept Visa, Master Card, Discover, American Express, Diner's Club and payments using a debit card.
- **Checking or Savings account**: pay either one payment at a time or register online to schedule recurring payments (see instructions to the right), or
- Request that we set up and schedule your recurring payments by filling out the authorization request form in this brochure.

How Does it Work?

Credit Card Payments: Pay.gov provides real-time authorization for all credit card payments. However, payments will generally be processed the next business day. Credit card limit is $99,999.99.

Bank Debit Transactions: Debit payments are processed the next business day; as long as the transaction is entered before 8:00 p.m. Eastern Standard Time. Transactions entered after 8:00 p.m. Eastern Standard Time may take two business days to process. Processing follows the Federal Reserve holiday schedule. See that schedule at:

http://www.federalreserve.gov/aboutthefed/k8.htm

How Do I pay ON-LINE?

Step 1: Obtain your DOJ CDCS number from your statement or contact your collection office. This number will begin with a year, a letter (normally A) and then 5 more numbers, i.e., 2009A00000.

Step 2: Log on to the Internet and type https://www.pay.gov into your browser's location bar, and hit "enter" to access the Pay.gov web page.

Step 3: From the home page, go to **Search Public Forms** and enter form name of

DOJ DAOG/CDCS

or click on the Department of Justice under Frequently Used Forms on the left side of the screen.

Step 4: Use your DOJ CDCS number and payment information to complete the form. Click submit and then the web-site will walk you through all the screens to do your final submission.

How to set up Recurring Payments?

If you would like to set up recurring payments through Pay.Gov, please do the following:

1. Go to http://www.pay.gov
2. In the middle of the page you should see:
   - Should I register?
   - Will you use Pay.Gov often?
   - Do you want to save your Profile?
   - Do you track your payments or set up recurring payments?

Click Here to Register

3. Click on the "Click here to Register" link and go through a self-enrollment process.
4. Once you are registered, go back to te Pay.Gov website and log in.
5. You need to go to the "DOJ DAOG/CDCS" form and fill out the first page just like you were making a non-recurring payment and put in the recurring payment amount and click to "Submit the form button."
6. The next screen is where you enter your bank information and select how much you want to pay, how often (weekly, bi-weekly, monthly, quarterly), and date when you want the recurring payments to come out of your bank account. You must enter the number of payments you want to make. For example, if you enter 10 payments, Pay.Gov will automatically take the next 10 payments and then stop taking payments after the 10th payment.

APPENDIX E

Example of 2014 Public Education Publication

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Be responsible: Proper use of fertilizers and pesticides

Maintaining beautiful lawns and landscaping may involve the use of pesticides and fertilizers. With proper care, you can maximize the benefits of these products while minimizing their adverse effects on the environment.

Fertilizers and pesticides provide nutrients to our lawns and gardens and protect them from pests. If they are applied too heavily, excess nutrients and chemicals are left in the soil. These excess pesticides and fertilizers can leach into groundwater systems or be washed into local streams, causing pollution, algae blooms and can lead to reduced oxygen levels in the water.

For fertilizers:

- Test your lawn's soil to determine its characteristics and which nutrients are lacking. Choose a product with appropriate proportions of nutrients needed.
- Minimize nitrogen use. Excess nitrogen is particularly harmful to wildlife and public health, especially small children.
- Choose slow-release fertilizers to minimize chemical loss through the soil and promote uptake by plants.
- Plant native grasses and plants that are adapted to the local environment and may not need supplemental nutrients.

For pesticides:

- Identify the pest and choose the appropriate control. Using the wrong pesticide could damage plants without solving the problem.
- Try nontoxic controls first. For example, soapy water can eliminate many garden pests.
- Follow the label if pesticides must be used. Do not overapply and only treat the affected part of the plant.
- Apply when pests are most vulnerable. Depending on the pest, applications at night, early morning or after watering may be most effective.
- Inspect for pests often. Catching a problem early reduces the amount of pesticide needed and prevents storage and disposal problems.

For more information on proper pesticide and fertilizer use or if you have any storm water related questions, please contact the Storm Water Hotline at 859/578-6745.

With proper care, you can maximize the benefits of fertilizers and pesticides while minimizing their adverse effects on the environment.

Managing storm water with DRIP

SD1 strives to develop and implement effective storm water programs that focus on preventing storm water pollution and managing the quantity and quality of storm water runoff in the region. SD1's Disconnection, Redirection, Infiltration Program, or DRIP, provides homeowners with step-by-step guides to help them implement methods of managing storm water runoff in their own yards and neighborhoods.

A few effective methods homeowners can use to help manage storm water runoff include:

Disconnecting your downspout

Downspout disconnection is the simple procedure of cutting off a segment of your home's downspout and redirecting the flow of storm water runoff from your roof to your lawn, a rain barrel or another vegetated area on your property. By disconnecting your downspout from SD1's sewer system, you can prevent excess storm water from entering the sewer system, as well as potentially redirect the water to an area for personal use.

Installing a rain barrel

A rain barrel is a container that collects and stores storm water runoff from your roof. The water collected from your roof can be used to irrigate landscaping. By using the water stored in the barrel, you can potentially reduce your water bill and aid SD1 in managing storm water runoff.

Planting a rain garden

A rain garden is a shallow, vegetated area that is designed to capture, store and clean storm water runoff. Installing a rain garden can beautify your property while protecting local waterways by managing runoff.

To download step-by-step guides for utilizing these methods, visit our website at www.sd1.org/DRIP.

SD1

Managing Northern Kentucky's Wastewater and Storm Water • SD1

1045 Eaton Drive
Fort Wright, KY 41017
phone: 859/578-7450

Hours of Operation:
Monday-Friday, 8 am - 4:30 pm